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ABSTRACT

The New Jersey Basic Skills Council seventh annual report to the Board of Higher Education looks at the status of the reading, writing, and mathematical skills of incoming freshmen and of the effectiveness of remedial programs in its public colleges and universities. A comparison is presented of students who needed and completed remediation; students who did not need remediation; and those who needed remediation but did not complete it. Findings are described for the New Jersey Higher Education System and for individual colleges. Seven outcome indicators reviewed for the student groups are passing rates, retention rates, college credits earned, grade point average, successful survival rates, pre- and post-testing, and performance in subsequent courses. Part-time remediation is noted. Conclusions include the need for improvement of the quality and completeness of the data on remedial outcomes that colleges collect. and note that New Jersey's remedial programs are successful in raising the skill levels of students who complete remediation. Recommendations include having all public colleges use exit-testing for their remedial programs and making sure all faculty teaching basic reading, writing, and mathematics access the latest research on effective teaching. Two appendices show sample tables (i.e. testing and placement of students, enrollment in and completion of remedial courses, and pre- and post-test results for remedial courses in reading, writing, math computation, and elementary algebra) and a listing of areas of research for future use. Tables are included. Contains two references. (SM)

ED304999

# EFFECTIVENESS OF REMEDIAL PROGRAMS

## in
## New Jersey Public Colleges and Universities

Fall 1983 - Spring 1985

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## Fall 1983 - Spring 1985

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Guidelines for Preparation of 1983-85 Institutional Report on Remedial Program Effectiveness

# EXECUTIVE SUMMARY

The New Jersey Basic Skills Council reports annually to the Board of Higher Education on the status of the reading, writing, and mathematical skills of incoming freshmen and on the effectiveness of remedial programs in the public colleges and universities. Statewide test results have consistently shown that from 31 percent (in verbal skills) to 60 percent (in algebra) of entering college students need remedial courses. In order to monitor the effectiveness of remedial programs, extensive follow-up data on these students are requested from each of the public colleges and universities.

This report, the seventh in the "effectiveness" series, is the second in which the follow-up duration was two years. Each college submitted data and narrative reports, following standardized guidelines from the Basic Skills Council, for the cohort of full-time freshmen who entered college in the fall of 1983 and persisted through four semesters (through the Spring 1985 semester). This report presents a comparison, using multiple measures, of three groups: students who did not need remediation; students who needed and completed remediation in the appropriate skill area; and students who needed but did not complete remediation.

Findings are described both for the New Jersey Higher Education System as a whole and, in a separate section, for individual colleges. All data reported and policy issues raised in this report are as of the spring of 1985 and consequently do not reflect the impact of any subsequent program changes that may have been made by the colleges on the basis of their internal review of these data.

General Findings and Concerns

This report reviews seven outcome indicators for the three student groups defined above and concludes that, in the aggregate, remedial programs in public colleges are upgrading the basic skills of underprepared students to a level where such students can be retained within, and hence profit from higher education. These outcome indicator data are reviewed in the body of the report.

Reports in this series have been concerned with the general question of whether collegiate developmental education is worthwhile, particularly when viewed at the system-wide level. Clearly, the answer is "yes." The reader, however, must keep in mind the distinction between evaluating system-wide remedial/developmental education and evaluating the extent to which an individual college's remedial program is successful. Statewide, a large number of remedial sequences (24,077 for the 1983-85 cohort alone) were completed by students who were previously judged unprepared for college work. This good news must be considered in the context of the four concerns raised below.

First, the extent of the need for remedial programs has not lessened. The percentages of freshmen needing skills courses have been relatively constant over the past eight years (as noted in the Council's annual test results report).

Second, the enterprise of remediation is not an easy one, for either the college or the students. Colleges, particularly in the two-year sector, expend a considerable percentage of their instructional effort on remedial courses. Students, for their part, often invest as many as three semesters in one or more remedial course sequences. Counseling, tutoring and advisement must be tailored to meet the needs of skills deficient students whose expectations and self-image may not be congruent with their academic preparedness. There is no quick fix for academic deficiencies.

Third, system or sector-wide averages mask wide variations in program effectiveness (see Section X). This report series began with an effort to collect accurate and appropriate data from each college. Upon the successful compilation of such system-wide data, broad conclusions on the relative success of remedial programs were reached last year and are reconfirmed in this year's report. To our knowledge, New Jersey is the only state that has collected such an array of data on the outcomes of remedial programs.

While some comment is made on individual college programs in Section X of this report, the Council's next report in this series will focus on the strengths and weaknesses of individual programs. The general parameters of the remedial programs are now sufficiently known; it is time to take the next step toward fine-tuning the system.

Fourth, the analyses in this report are based on comparing the performance of remediation-completed students with that of non-remedial students. The latter serve as a yardstick for the former. The reader should also be alert to judging the absolute values of the data reported for non-remedial students. For example, is a four-semester retention rate of 63 percent for non-remedial students in the four-year state colleges a satisfactory figure?

Further, analyses in this report pertain only to students who persisted in the higher education system. No follow-up data was gathered on those who dropped out, "stopped out" or transferred before completing four semesters.

Design Dilemmas in Assessing "Effectiveness"

The evaluation design chosen is not one of a "controlled" experiment; i.e., one that withholds remediation from a randomly chosen needy group of students and compares their result to a "remediated" group. Rather, our strategy is to gather data on multiple indicators relating to most of the aspects that are relevant to a successful program. For example, regarding those students placed by a college in remedial course sequences, the assessment is designed to produce answers to the following questions: What percentage pass the remedial course? If post-tests are given, what percentage attain the placement criteria for the first college course? What percentage are retained in college for four semesters? What are the grade point averages of retained students? What percentage of these students have a "C" average (or better)? What percentage of these students pass their subsequent, first college-level course that requires the skill area just remediated?

Judging the effectiveness of a program on only one or two of these indicators would not produce an accurate assessment of the college program. A pattern analysis of individual programs, much like a "personality profile," is required. Within such an analysis, based solely on statistical indicators, a potential exists both for unwarranted criticism and for unfounded praise. For example, do high remedial course passing rates indicate effective instruction or lax grading standards? Only an analysis of subsequent post-test competence and college course performance can tease this out.

A longitudinal analysis, i.e., over several cohorts of students, is the most accurate way to assess the effectiveness of programs. Such data will be available with the next report. Consequently, the Basic Skills Council has chosen a cautious interpretation of the individual college data presented in this report.

Statewide Patterns

The most important finding of the present report is that full-time, skills-deficient students who complete their college's remedial course sequence have two to three times the chance of college success as students who need but do not complete remediation. This is a pattern identical to the finding in the previous (1982-84) effectiveness study. It suggests to the Council that the state's investment in placement testing and remediation has been productive. Specifically, the data on outcome measures gathered for this study indicate that:

o Retention Rates at four semesters for those students who complete remediation are similar to or higher than the rates for students who did not need remediation. For these two groups respectively, retention was 72 vs. 69 percent at the state colleges and 56 vs. 52 percent at the county colleges. Retention rates of students not completing needed remediation, on the other hand, were only 31 percent in the state colleges and 21 percent in the county colleges. The pattern was similar at Rutgers and NJIT.

- Since retention is a necessary but not sufficient indicator of program success, the Successful Survival Rate (SSR), that is the percentage of the original cohort who both remain and have at least a "C" average, was computed for all three groups. Students completing remediation had SSR's similar to non-remedial students at both state and county colleges. At Rutgers the SSR's of the two groups were not as close as in the other sectors.

  In contrast, the SSR's of students who did not complete remediation were only about a third of those of students who completed remediation.

- In terms of college credits earned at the two-year point, remediation-completed students in the state colleges were on the average only five credits (46 total) behind non-remedial students (51 credits). At the county colleges, where many students need multiple levels of remediation, the gap in credits earned between students not needing remediation and remediation-completed students was 10 credits (44 vs. 34). At both Rutgers and NJIT, this difference in credits earned was seven. For many students this "gap" can be effectively closed by taking two to three college courses in the summer.

- Despite the temporary slowing of progress toward the degree, students who complete remediation benefit from: a preparation that gives them a probability of passing college-level courses nearly as high as that of non-remedial students, of attaining grade point averages only slightly lower than non-remedial students, and of having successful survival rates two to three times higher than students who did not complete remediation.

- If remediation is effective, students who have completed it should pass their subsequent college-level courses at rates similar to non-remedial students. Averaged across all college sectors, the difference in passing rate for college-level English Composition between non-remedial and writing-remediated students was seven percent (87% vs. 80%). In subsequent college-level mathematics courses the difference in passing rates between non-remedial and algebra-remediated students was 10 percent (84% vs. 74%).

- While these passing rates are generally acceptable, they might be improved if all students exiting remedial sequences were indeed prepared for college work. While virtually all institutions that reported post-test data indicated significant gains in student scores on pre- and post-remedial course testing, not all students who passed a remedial course actually met the criteria established by that institution for entry to college-level work. Sixty cases of program exit-testing (representing approximately 10,000 students) were reported. Of these, only one-third of the programs had over 90 percent of their students reaching the college's placement criteria on the post-test after passing the highest level remedial course. Thirty-eight percent of the program post-tests revealed less than 70 percent of students reaching minimum competence on their post-tests.

- The sample of post-test results in this report suggests that the success of remedial programs in our colleges, though considerable, is limited in some respects. For students who completed remediation, performance on multiple outcome measures heretofore has been judged on a standard relative to non-remedial students. Exit-testing imposes a more absolute standard of performance. Data from the current sample of post-tests suggests that there is considerable room for improvement in specific remedial programs in the state. However, these data are as yet too incomplete to suggest definitive conclusions.

  The student progress seen in the post-test data is often significant and thus commendable. However, progress from a very low starting point may not always be sufficient to reach the level necessary for college work (e.g. pre-/post-test scores that increase significantly from a "12" to a "32" are commendable but insufficient if a "70" is the criterion). For students with several deficiencies more time may be needed to improve their skills to the college level.

## Institution-specific Patterns

There is wide diversity across colleges in both remedial program structures and in the effectiveness of remediation within each skill area. Within colleges, variation was noted both in policies and in program effectiveness among skill areas. For example, a given college may demonstrate effective programs in reading and algebra but exhibit weak program results in writing. In addition, many institutions, particularly in the county college sector, choose to require remediation in algebra only of those students in math-related majors.

Further, in instances of incomplete or inadequate data from a college, judgements about the academic quality of a program may not be accurate. There could be one or more institutions which expend adequate effort and resources on remedial program instruction but do not do an adequate job of collecting and reporting outcome data. Needless to say, there is room for improvement in the quality and completeness of the data being given to the Council.

This report contains a section that presents individual institutional profiles for each remedial program. Areas where colleges can improve performance (or ought to conduct institutional research on anomalous outcomes) are explicitly noted. These reviews are provided in a collegial spirit with the intent of providing information that can lead to program improvement. Each college was given the opportunity to comment on its profile prior to the publication of this report.

The profiles section of next year's report will be more extensive and will use longitudinal data to illuminate program strengths and weaknesses more clearly.

## Recommendations

This report is the second two-year cohort study of remedial students. The statewide and institutional patterns that have emerged are now sufficiently clear and consistent that the Basic Skills Council recommends the following:

o Exit-Test Data for Remedial Programs

College-level courses should be conducted on the expectation that students possess the skills needed to succeed in the courses. Therefore, placement criteria should be established carefully so as to allow students the opportunity to demonstrate these skills. Similarly, exit criteria from remedial programs should be developed to assure that students are entering college-level courses with the skills they need to succeed. Whatever level of skills proficiency a college determines for entrance into a college-level course should apply equally to students who are initially placed in that course and to students who come to the course by way of a remedial program.

Exit-testing (i.e., at the end of the last remedial course) is currently being reported for only 63 percent of remedial programs. The Council recommends that all public colleges employ exit-testing for their remedial programs. Appropriate standardized tests such as the NJCBSPT should be used. If tests other than the NJCBSPT are used for post-testing, equating with the NJCBSPT should be done.

The Council's intent in collecting exit-test results is to assess programs, not individual students. Towards this end, a college could opt to test all exiting remedial students or a random, representative sample.

- Institutional Self Assessments

To date most institutions provide their remedial outcomes data without explicitly attempting to assess the status of their programs. In the future, the Council's reporting guidelines will ask each college to provide narrative that assesses its remedial program strengths and weaknesses, both in light of data from comparable institutions and in the context of program development over time.

- Consultative Assistance to Remedial Programs

The Council will expand its current site visit program, which to date has sought to observe noteworthy programs, to offer consultations to those programs seeking assistance or review. Further, the Council recommends that funds be made available to provide options for consultative assistance to those institutions whose remedial program or program components need improvement.

- State-wide Faculty Networks

  Faculty teaching basic reading, writing and mathematics courses should have access to the latest research on effective teaching methods. The Council recommends that the Board of Higher Education foster statewide networks designed to collect and exchange information on pedagogical methods.

- Local Research Efforts

  The Council's guidelines for the preparation of institutional effectiveness reports should be viewed as minimum evaluation requirements. The Council urges colleges to conduct local research efforts that focus on areas needing improvement, serve to advance the effectiveness of student learning in established programs, and evaluate patterns over time that could reveal more about the strengths and weaknesses of individual programs. The Council would welcome the receipt of such reports from institutions for the purpose of sharing information among colleges.

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# INTRODUCTION

## Background

Evaluating any educational program is a difficult and complex process. Each college has a distinct mission, and a heterogeneous student body with a wide range of basic skills preparation. Most New Jersey institutions provide multiple levels of remedial/developmental courses. The Basic Skills Council's goal of evaluating remedial programs in a consistent manner depends upon formulation of a common set of questions and definitions which yield useful data yet permit recognition of institutional idiosyncracies and preserve institutional autonomy.

When it authorized the development of the New Jersey College Basic Skills Placement Test (NJCBSPT) in 1977, the Board of Higher Education of the State of New Jersey also required reports from the public institutions of higher education on the character and effectiveness of their remedial programs. Virtually all freshmen entering New Jersey public colleges are now tested in reading, writing, computation and elementary algebra. The consistent finding from this testing program has been that between 31 percent (in verbal skills) and 60 percent (in algebra) of entering students lack the competence to begin college work in one or more areas. Consequently, all public colleges have remedial programs designed to raise the skill levels of students found to be poorly prepared for college. This is the seventh report of the Basic Skills Council to the Board on the effectiveness of remedial programs in New Jersey's public colleges and universities.

## Assessment Design

Six years ago, recognizing the complexity of the data collection and analysis involved in an adequate and fair evaluation of the state's public college remedial programs, the Basic Skills Council created the Assessment Committee to advise the Council on methods of program evaluation. Composed of institutional researchers, administrators and faculty representing each sector of New Jersey public higher education, the Committee formulated and, over several years, refined the assessment design used in this report. A report on program effectiveness is required of each college, including both a narrative description and a set of tabular data, following the "Guidelines for Preparation of Institutional Reports on Remedial Program Effectiveness" (see Appendix A).

In recognition of the fact that remediation (particularly for students who have more than one deficiency) may take longer than two semesters, the Council required reporting from each college on the cohort of full-time students who entered in the fall of 1983 and were enrolled through the spring of 1985.

The Council's approach to the assessment of remedial program effectiveness uses multiple measures to compare each of three full-time student groups within the colleges. Students who need and complete remediation are, on the one hand, compared with students who did not need remediation. On the other hand, remediation-completed students are compared with students who did not complete needed remediation. This is a "relative" form of comparison in that it judges the performance of a college's remedial program relative to the college's own standard -- its non-remedial student outcomes.

This approach is supported by the work of Akst and Ryzewiz, who conducted a national survey in 1985 of the methods used by 700 colleges to evaluate remedial mathematics programs: they recommended that "...summative evaluations should compare the achievement in follow-up courses of students who have passed remedial math courses with students who needed but did not receive remediation, and with students who were initially exempted from remediation" (Akst and Rysewiz, 1985).

Program evaluation per se is a problematical and difficult task, but when diverse programs developed at very different kinds of institutions have to be assessed on the basis of uniform procedures it becomes a formidable undertaking. As educational researchers know, barring a strictly control/experimental groups design in which remedial students can be randomly assigned to control (no remediation) and experimental (receiving remedial instruction) groups, there is no other fully satisfactory method of evaluating the effectiveness of remedial programs. The control/experimental groups design was rejected by the Assessment

Committee as an impractical option because of the obvious ethical, public policy, and governance problems which could arise from a state requirement denying remedial help to a substantial number of students who need it.

In the absence of such a single measure which could provide sufficient information on the effectiveness of remedial programs, it was decided to identify multiple outcome measures which would provide evidence in context, even if it could only be interpreted cumulatively. If multiple measures for an institution form a consistent pattern, then adequate conclusions on the effectiveness of remediation at the institution could be drawn. As Sullivan and Feldman argued in 1979: "If we claim to measure a certain trait, or abstract concept, with each of several very different methodologies, and these very different measurement procedures produce results which are quite similar, we may be more confident in the validity of our measures than if this were not the case."

Our strategy is to gather data on multiple indicators relating to most of the aspects that are relevant to a successful program. For example, regarding those students placed by a college in remedial course sequences, the assessment is designed to produce answers to the following questions: What percentage pass the remedial course? If post-tests are given, what percentage attain the placement criteria for the first college course? What percentage are retained in college for four semesters? What are the grade point averages of retained students? What percentage of these students have a "C" average (or better)? What percentage of these students pass their subsequent, first college-level course that requires the skill area just remediated?

Judging the effectiveness of a program on only one or two of these indicators would not produce an accurate assessment of the college program. A pattern analysis of individual programs, much like a "personality profile," is required. Within such an analysis, based solely on statistical indicators, a potential exists both for unwarranted criticism and for unfounded praise. For example, do high remedial course passing rates indicate effective instruction or lax grading standards? Only an analysis of subsequent post-test competence and college course performance can tease this out.

A basic dilemma is whether each program's functioning is adequately reflected in its reported data. A longitudinal analysis, i.e., over several cohorts of students, is the most accurate way to assess the effectiveness of programs. Such data will be available with the next report. Consequently, the Basic Skills Council has chosen a cautious interpretation of the individual college data presented in this report. Meanwhile, the existing indicators will continue to be refined. In addition, the Council will pursue ways of getting more complete data from the colleges and will develop new models for setting comparative standards using the present set of indicators.

Recently, the Assessment Committee has given considerable thought to a proposed supplemental design, namely a single-measure, pre- and post-test study with new data to be collected. The committee has concluded that this would be a weaker design than the present analyses of multiple indicators, would add no new information, and would lead to erroneous conclusions as explained below.

Pre- and post-test results on remediated students provide one of the seven indicators of program effectiveness. In the absence of similar data for a comparable control group, conclusions from such test results must still be open to several interpretations. Moreover, if assessment were to be based solely on significant differences between pre-test and post-test scores, almost all remedial programs would appear to be effective based on the data currently being submitted by institutions. Therefore, recognizing inherent problems involved in interpreting pre- and post-test data in the absence of a control group and recognizing that relatively small differences between pre- and post-test scores can be statistically significant, the Assessment Committee has de-emphasized the use of gain scores. Instead, the focus has been on the percent of those completing remediation who reach minimum competency on a post-test (i.e., earn a score sufficient for placement into first college-level course). It should be understood that this percentage is affected by the placement criteria adopted by an institution and by the match between post-tests and remedial course content.

This report primarily reflects statistics submitted by the institutions. However, the colleges' reports also included narrative sections containing the following information: history of the program, placement criteria and their efficiency, course descriptions, support services, staffing patterns, college policies, and student performance results. This additional information provides a valuable context for interpreting the numerical data. The individual college narrative reports should therefore be of great interest to each institution's Board of Trustees.

## OUTCOME INDICATORS

The Summary Table below presents retention rates, percentages of grade point averages greater than or equal to 2.0, and successful survival rates for all the college sectors averaged across each of the four remedial areas. Parallel data for the 1982-84 cohort are provided for comparison. Throughout this table the dominant pattern is that the remediation-completed student data are similar to that of non-remedial students. In contrast, students not completing remediation have retention and successful survival rates two to three times lower than those of non-remedial students.

In the 44 tables that follow the narrative, data are presented on each of the seven outcome indicators for each of four remedial skill areas. Each table contains data for individual colleges as well as weighted means by sector.

### Passing Rates of Students in Remedial Courses

The first of the seven outcome indicators to be examined is the passing rate of students in remedial courses. In general, a low passing rate indicates a problem which should be investigated. It may be a warning about the quality of instruction, or it may mean that the level of the course taught is too high for a large majority of the students. (In this latter case, more class hours or a lower-level course may be appropriate.) On the other hand, a high passing rate is often a good sign. It may indicate good teaching at an appropriate level for the students. However, an extremely high passing rate could also be a clue that the course is too easy for a large number of students. Analysis of other indicators would be needed to resolve such issues.

Tables 1 through 4 provide data by college on the passing rates in remedial courses in each skill area. The colleges were asked to provide data only on the highest level (or last) remedial courses in their sequences.

Across the county colleges, an average of 75 percent of full-time students passed their remedial reading courses (range: 53-100%), 72 percent passed writing courses (range: 59-87%), 68 percent passed computation courses (range: 55-84%) and 65 percent passed elementary algebra (range: 31-84%). Among

## SUMMARY TABLE

### PERCENTAGES FOR RETENTION, GRADE POINT AVERAGES AT OR ABOVE 2.0, AND SUCCESSFUL SURVIVORS AVERAGED ACROSS ALL REMEDIAL AREAS BY "NEED FOR REMEDIATION" STATUS AT FOUR SEMESTERS, FALL 1982 AND 1983 COHORTS

| | COUNTY COLLEGES | | | STATE COLLEGES | | | NJIT | | | RUTGERS | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Remediation | | | Remediation | | | Remediation | | | Remediation | |
| | Not Needed | Complete | Not Complete* | Not Needed | Complete | Not Complete* | Not Needed | Complete | Not Complete* | Not Needed | Complete | Not Complete |
| Retention | | | | | | | | | | | | |
| 1983-85 | 52 | 56 | 21 | 69 | 72 | 31 | 64 | 60 | 18 | 86 | 83 | 66 |
| 1982-84 | 51 | 55 | 22 | 70 | 75 | 39 | 66 | 64 | 18 | 83 | 83 | 73 |
| GPA ≥ 2.0 | | | | | | | | | | | | |
| 1983-85 | 81 | 65 | 58 | 86 | 75 | 61 | 83 | 77 | 60 | 86 | 67 | 66 |
| 1982-84 | 79 | 69 | 60 | 86 | 76 | 57 | 79 | 69 | 25 | 84 | 73 | 69 |
| Successful Survival | | | | | | | | | | | | |
| 1983-85 | 43 | 38 | 13 | 59 | 54 | 19 | 55 | 46 | 11 | 74 | 56 | 43 |
| 1982-84 | 40 | 37 | 12 | 60 | 57 | 24 | 55 | 42 | 5 | 71 | 61 | 52 |

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*Includes all students identified as needing remediation who either had not enrolled in or else had not completed their college's recommended remedial sequence.

full-time students at the state colleges, passing rates were slightly higher: an average of 87 percent in reading (range: 80-98%), 85 percent in writing (range: 64-90%), 86 percent in computation (range: 66-92) and 83 percent in algebra (range: 70-93%). At Rutgers the average passing rates for 1983 full-time students were 84 percent in reading (range: 81-97%), 90 percent in writing (range: 78-93%) and 75 percent in algebra (range: 72-84%).

Despite the consistency of passing rates over a whole sector, passing rates varied widely among colleges and also within a given college by skill area and course level. Low passing rates within a course or a program should be analyzed by the individual college to determine which of the following factors might be in operation:

- inappropriate curricular levels (e.g., more than one level of a remedial course or more than one semester may be needed to serve the needs and raise the proficiencies of students with low skills levels);

- inappropriate placement (e.g., some students may have been placed at a level higher than they could handle);

- lack of effectiveness in the instruction provided; or

- various student-related factors (e.g., withdrawal from courses or from the college due to personal reasons).

Colleges should aim for the highest possible passing rates in these courses consistent with students attaining proficiency.in the skill area being addressed.

Retention Rates

The rate of retention of an entering group of students is a traditional measure of the health of an institution of higher education, but it must always be interpreted in light of the mission and sector of the institution as well as in light of the objectives of the students.

Interpretation of retention rates for two-year colleges must take into consideration their more varied missions and their more "open-door" admissions policies relative to four-year schools. While many students seek associate-level degrees in New Jersey's county colleges, a substantial number seek early transfer to a four-year school or desire to complete only a few career oriented courses. Early transfer of such students (i.e., at the second or third semester) may be seen as a mark of the institution's success in preparing these students, but at the same time this success lowers the institution's reported retention rates. On the other hand, a very low retention rate may indicate that an institution is not meeting its students' needs and that its policies and/or services should be reviewed.

Students leave college for a variety of reasons; for example, poor grades, transfer to other institutions, poor health, financial hardship and changes in career goals. Therefore, in inspecting the tables under "Retention Rates," it is important to examine not only the retention rates of the students needing remediation but also to compare those rates with those students who did not need remediation at the same college.

What continues to be the most consistent finding in this report series is that, across all collegiate sectors and in all skill areas, students who complete remediation are retained in college at rates that are similar to or higher than those for students who did not need remediation, and at rates much higher than for those who did not complete it (see Tables 5 - 8). This pattern was seen in the current two-year study group and in the comparable group from the previous (1982-84) Effectiveness Report. Two year retention rates for the groups for both cohorts are given as weighted averages across all skill areas in the Summary Table.

Overall, the county colleges have the lowest retention rates, and Rutgers University has the highest. Eighty-three percent of remediation-completed students at Rutgers were still enrolled at the fourth semester (Spring '85). Fifty-six percent of remediation-completed students remained at the county colleges at the fourth semester. These retention rates are reported as percentages of the original cohort that began in Fall 1983.

The remediation-incomplete groups in Tables 5 through 8 showed the lowest retention rates. In the county colleges, these students had a probability of remaining in college of only 14 to 27 percent if they had not completed remediation. At the state colleges, the retention rates in the fourth semester for the remediation-not-completed groups ranged from 26 to 35 percent.

Being "retained" in a college at the fourth semester, however, does not necessarily mean that the student is "successful" in that college. The section on "Successful Survival Rates" addresses this issue.

The consistent finding across the last two reports, that students who completed remediation are even more likely than non-remedial students to remain in college for at least four semesters, may seem surprising to some. One possible explanation is that the extra attention given to remedial students in the form of special advisors, peer tutors, etc. not only helps them academically but also helps them feel more socially "at home" and, hence, more likely to remain at the college. Last year, the Council recommended that individual institutions study this phenomenon on their own campuses. Site visits conducted during the past academic year by the Assessment Committee have begun to yield a pattern that suggests that this social milieu is important.

College Credits Earned

Colleges were asked to report the mean total college credits earned for each of the three study groups at the end of the fourth semester. Tables 9 through 12 display the average number of credits earned in each college by each skill area over the four-semester period. Tables 13 through 16 show the mean credits earned (by skill area) in each college for the most recent term only (Spring '85).

The most important issue arising from these data is the size of the difference, "the gap," in credits earned between non-remedial and remediation-completed students. Tables 9 through 12 contain the average credits earned both by college and as weighted averages by sector in each of the four remedial areas. The difference in credits earned ranges from as low as two credits for algebra-remediated students in the state colleges to a high of 11 credits for writing-remediated students in the county colleges.

Combining all the remedial areas with weighted averages results in the following differences in total credits earned through four semesters between non-remedial and remediation-completed students: county colleges, 10 credits (44 vs. 34); state colleges, 5 credits (51 vs. 46); NJIT, 7 credits (59 vs. 52), and Rutgers, 7 credits (56 vs. 49).

A second, related issue is whether students who completed remediation assumed course "credits earned" levels in their fourth semester comparable to students who did not need remedial courses. Tables 13 through 16 display the credits earned for the Spring 1985 semester. Across all disciplines, remediated students at the county colleges averaged a Spring 1985 semester credit load within two credits (9 vs. 11) of their non-remedial peers; at the state colleges, the two groups were within one credit (12 vs. 13); at NJIT the difference was one credit (13 vs. 14); and at Rutgers, it was two credits (12 vs. 14). Students who were "full-time" in their first semester (and hence counted as such in these study groups) may become part-time students in any semester. This fact can depress the average credits earned reported for Spring 1985. The "credits earned" evidence is in keeping with the overall pattern of remediation-completed students progressing and succeeding in college very much like students who did not need remediation.

While it is encouraging that remediation-completed and remediation-not-needed groups were earning college credits at comparable rates, nevertheless some students who did not complete remediation by the fourth semester and who were still in college were also passing their courses and earning college credits. It should be noted that these students were very few in number (20-25 per college). Their motivation, their relative maturity, the nature of their skills deficiencies (e.g., "math only" versus multiple deficiencies) and their possible selection of less demanding courses may play significant roles in their success.

## Grade Point Average

The fourth indicator used to assess remedial programs is grade point average (GPA). The use of GPA as a measure of performance is based upon the notion that students who have completed needed remediation should be able to earn satisfactory grades in non-remedial courses in the semesters following remediation. The colleges were asked to report GPA's for each of the three groups being studied (non-remedial, remediation-completed, and remediation-not-completed). Grade point averages were reported both cumulatively (i.e., from first through fourth semesters) and for the Spring 1985 term alone. For the students who were present in the spring semester, the colleges reported the percentage of students in each group whose GPA's were greater than or equal to 2.0 (the equivalent of a "C" average, which is generally the minimum average required for graduation from college). Tables 17 through 20 present the cumulative GPA's for the three study groups, by discipline for each college. Tables 21 through 24 present the GPA's for the most recent term only (Spring '85).

Across all the tables a consistent pattern is evident: students completing remediation (all areas combined) achieved much higher GPA's than the few remaining students who needed but had not completed remediation. Grade point averages of students completing remediation did not, however, equal the GPA's of non-remedial students. At the county colleges, the weighted GPA's across all skill areas for the three study groups were 2.53 (non-remedial students), 2.19 (remediation-completed students) and 2.01 (remediation-incomplete students). At the state colleges the respective GPA's were 2.70, 2.41 and 2.15. At NJIT, the averages were 2.61, 2.44 and 2.33 (for 10 students). For Rutgers: 2.69, 2.24 and 2.31.

The only apparent discrepancy in these results is the relatively high GPA found for the remediation-incomplete students at Rutgers. The bulk of this group was composed of students who had not completed algebra remediation but who were obviously coping well with their other college work.

Tables 17 through 24 also record the percentage of students in each college who had GPA's at or above 2.0. Within the four skill areas a number of programs have percentages of remediation-completed students that are only in the 50 percent (or lower) range. While the mean GPA of these groups may hover around a "C," the future retention of the group as a whole requires that a more substantial percentage be at or above the "C" level. Colleges whose remediation-completed student groups have less than 60 percent of the cohort at or above a 2.0 average should carefully examine the academic status of these students and determine whether changes are needed in the remedial curriculum, in the advising system, or in other areas.

## Successful Survival Rate

The successful survival rate (SSR) is a measure designed to assess the relative success of an academic program by combining the GPA variable and the retention rate. The successful survival rate for the four-semester cohort can be illustrated as follows: if 100 freshmen enrolled in the fall and 80 remained four semesters later; and of those 80, 65 had a GPA above 2.0, then the SSR would be 65/100 or 65 percent. Note that this rate is lower than the retention rate (i.e., 80%) because it asks the question: "How many students, as a percentage of the original cohort, both remained and had a "C" or better average?"

Data on the SSR's at each of the colleges are presented in Tables 25 through 28. Comparisons among the non-remedial, the remediation-completed and the remediation-not-complete groups are again striking. At the county colleges, the average successful survival rates across skill areas were 43 percent, 38 percent, and 13 percent for the three study groups respectively. At the state colleges, the successful survival rates were 59 percent, 54 percent and 19 percent.

At Rutgers, the four-semester SSR's averaged across the skill areas were: 74 percent for the group that did not need remediation, 56 percent for the group that completed remedation and 43 percent for the group that did not complete remediation. At New Jersey Institute of Technology, the three groups averaged 55 percent, 46 percent and 11 percent. Again, the results for Rutgers students were inconsistent with the statewide pattern. The SSR for students who did not complete remediation is high.

Rutgers attributes this finding, in part, to an over-identification of students in need of reading remediation in the fall of 1983. Many of these borderline students avoided reading remediation courses and yet maintained "C" averages.

The successful survival rate is the most sensitive and descriptive indicator that the Basic Skills Council uses to describe the relative success of remedial programs. It clearly illustrates the similarity in performance of students who have completed remediation to those who did not need remediation. It also illustrates rather graphically the low probability of success in college (13% in county colleges, 19% in state colleges) found for students who began college but did not complete a needed remedial sequence before the end of their second year.

The SSR for remediation-completed students varied widely within sectors. For example, in the groups of students who completed writing remediation, SSR's ranged from 20 to 48 percent in the county college programs and from 38 to 62 percent in the state college programs. Colleges which have SSR's for this group that fall in the lower end of the sector range should be actively reviewing their remedial programs to determine areas that can be improved.

## Pre-/Post-Testing and Minimum Competency

Colleges were requested to submit data on the results of any pre- and post-testing in remedial courses. Most colleges provided "sample" post-test data-- that is, from several but not all course sections. Of 119 possible post-test areas, the colleges provided data for 75, or 63 percent of the possible total. Of the 75 reports of post-test data, only 60 include percentages of students reaching minimum competency on the given post-test.

The New Jersey College Basic Skills Placement Test could be considered a pre-test for all students, and the Council has made alternate forms of the test available for post-test use. However, many colleges use a variety of other pre- and post-tests (see Tables 29-36). This variety makes a consistent interpretation of pre- and post-test results difficult. Nevertheless, it is true that across the colleges virtually every reported post-test analysis showed statistically significant gains in scores. In other words, the score gains between pre- and post-testing were large enough not to have occurred by chance.

It is important, however, to distinguish between a gain in test scores and the attainment of the minimum competency needed for college work. A student with an algebra score of, for example, 140 may "improve" to a post-test mean of 155. But if a 165 score on this hypothetical test represents minimum competency as set by the institution, then the student would still have a long way to go before being adequately prepared for college-level work. Such a student may need another semester of remedial work at that institution.

In the college profiles section, the percentage attaining minimum competency for the highest-level remedial course in each skill area is presented for each college that provided such data. Post-testing was specified only for students who passed the highest level remedial course. In Tables 29-36, it is clear that many samples showed that the percentage of students who attained the minimum level (as defined by the colleges) was not only highly variable but often very low.

Sixty pre-/post-test comparisons listing percentages of students attaining their college's minimum post-test level were reported. Of these only one-third revealed 90% of students both passing the last level remedial course and reaching minimum competency. Across all sectors and remedial areas, the program post-tests were distributed as follows: 20 percent of the program post-tests showed student attainment of minimum post-test scores as less than 50 percent; 18 percent of program post-tests revealed minimum post-test scores between five and 69 percent; 15 percent of program post-tests were between 70 and 79 percent; 13 percent fell between 80 and 89 percent; and the last third of program post-tests showed attainment of minimum post-test scores to be 90 percent or above. While these data represent but a sample of the possible post-tests, they raise questions about the possibly large numbers of students who were moved out of remediation without the confirming evidence of successful performance on an exit test with appropriate proficiency standards.

Inspection of the profiles of individual college remedial programs indicates that where minimum levels on "post" or exit-testing were low, the students who were then "passed along" into credit-bearing courses attained lower grade point averages than students who exited from programs where the percentage of minimum post-test levels upon exit was higher. Institutions should examine this pattern where it occurs in their remedial programs. It can suggest that another level of remediation should be added in that skill area or possibly that standards for completing remediation should be raised.

In order to ensure that students do complete remediation with appropriate, college-level skills, passing grades in courses must be supplemented with objective measures of minimum competency. Exit requirements from remedial programs should be defined by the faculty at the individual institutions. Like placement criteria, they should consist of multiple measures such as examination grades in the course, department-wide evaluations, in-class work, and standardized tests. Exit standards may be more complex (and higher) than the demonstration of "minimum competency" via objective testing.

## Performance in Subsequent Courses

Colleges were asked to compare the passing rates in specific college-level courses of those students from the two-semester cohort who completed remediation with those students who did not need remediation. Obviously, it is a goal of remediation to enable students to succeed in subsequent college-level courses. Data were requested on this comparison for two types of courses, depending on skill area:

- first-semester, regular college course in English composition; and

- first college-level course in mathematics.

Tables 37 through 44 provide data on performance in subsequent college-level courses based on original need for remediation in four areas: reading, writing, mathematical computation and elementary algebra. The results indicated that across all the tables, the range of differences between non-remedial and remediation-completed students was from 3 to 16 percentage points. The larger variations appeared between the two groups in subsequent first-level mathematics courses. At the county colleges (Table 37), the two study groups differed by only three percentage points (81 vs. 78%) in passing rates for English Composition, but by twelve points (78 vs. 66%) in passing rates for first-level college mathematics courses (Table 43) taken following algebra remediation.

The highest passing rates, in general, were found at Rutgers (up to 97% of non-remedial students pass English Composition). Remediation-completed students at Rutgers showed passing rates in English Composition quite comparable to non-remedial students. However, the widest variations in passing rates were also found in the Rutgers sector. The largest difference in passing rates in this study is the 16-point difference (88 vs. 72%) between non-remedial and remediation-completed students in first college-level mathematics at Rutgers (Table 44). It should be noted that the first-level mathematics courses represent a wide range of content across Rutgers' undergraduate colleges and that the students who complete mathematics remediation make up a relatively small percentage of the enrollment.

## PART-TIME STUDENTS

The policy of the Board of Higher Education concerning part-time students with remedial needs is that such students should be enrolled in remediation within four semesters. Since this report covers only a four-semester time span, part-time student outcomes were not required from the colleges. Because of irregular enrollment patterns and lower course loads, very few part-time students complete remediation within four-semesters. As a part of the October 18, 1985 report to the Board on the "Character of Remedial Programs in New Jersey Public Colleges and Universities," the Council reported on a special follow-up study of skills-deficient, part-time students. One finding in that study was that very few part-time, skills-deficient students (between 28 and 40%) actually attend college for four consecutive semesters; however, their rates of enrollment in required remedial courses were not significantly different from those of full-time students (84% enrolled in needed reading courses, 84% in needed computation, and 77% in elementary algebra).

The only data for part-time students in the current report are the passing rates for the first level of remediation, found in Tables 3 and 4. In general, part-time students passed their remedial courses at rates only a few points lower than the full-time remedial students. A comparison of Table 3 with the full-time student data in Table 1, for example, shows that in reading courses from the county college sector, 75 percent of full-time students passed, while 72 percent of part-time students passed. In writing, the comparable figures were 72 percent and 68 percent; in computation, 68 percent and 64 percent; and, in elementary algebra, 65 percent and 60 percent.

## CONCLUSIONS

Statewide reporting on the outcomes of college remedial programs in as much detail as required by the Basic Skills Council is an effort currently unique to New Jersey. The public colleges have, over the past six years, restructured their computerized record keeping systems to comply with the Council's requirements for remedial outcomes data. While these data are self-reported by the colleges, the reporting guidelines are sufficiently standardized (and supplemented by workshops held for institutional report respondents) and the institution-specific data are sufficiently cross-checked that the Basic Skills Council can confidently draw the following general conclusions:

- When viewed as a unified pattern, the seven outcome indicators studied in this report show that, in general, the remedial programs in the New Jersey system of higher education are successful in raising the skill levels of students who complete remediation to a point where their subsequent college performance (retention, grade point average and passing rates in subsequent courses) is satisfactory relative to the performance of non-remedial students.

- In terms of the two-year duration of this report, the data should be regarded as a snapshot of a moving stream of students through the state's system of higher education. Across all college sectors and remedial areas, this report represents data from 30,581 grades[1] assigned at the level of the final remedial course in each college. Across the system, 75 percent of the students passed (range. 65-90%) their remedial courses.

- Those students completing remediation across all skill areas (24,977[1]) exhibited two-year retention rates similar to (and in the case of county and state colleges higher than) non-remedial students.

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[1] Duplicated head count. Many students are enrolled in more than one remedial area.

- In subsequent college-level courses that assumed proficiency in the skills being remediated, students who completed remediation generally passed the courses at rates similar to non-remedial students. Passing rates in these subsequent courses ranged from 80 to 90 percent. Students completing mathematics remediation were not as close to their non-remedial counterparts as students who completed remediation in reading or writing.

- Full-time students who completed remediation assumed college-level credit loads in their fourth semester that were within two credits of those of non-remedial students. Accumulation of total credits was lower for remediation-completed students by five to 10 credits--a gap that could conceivably be closed for many students by taking summer courses.

- In contrast, students who did not complete remediation within two years have chances of successful survival approximately three times lower than remediation-completed students.

- There is room for improvement in both the quality and the completeness of the data on remedial outcomes that colleges' collect, both for their own internal use and for reporting to the Board. Systems of program evaluation can only be as valid as the data on which they are based. The numerous gaps in the tables contained in this report indicate that the data collection and reporting functions at many colleges can be improved.

  The quality control of remedial programs that stems from exit testing is also in need of improvement. The data in this report on program pre-/post-testing is incomplete, a mere sampling of the entire context of college remediation. The 60 pre-/post-test cases that were reported, however, give cause for concern. The percentages of students emerging from some programs with requisite scores for college-level placement are unsatisfactory.

Based on the findings in this report the Council makes the following recommendations:

### Recommendations

This report is the second two-year cohort study of remedial students. The statewide and institutional patterns that have emerged are now sufficiently clear and consistent that the Basic Skills Council recommends the following:

o Exit-Test Data for Remedial Programs

College-level courses should be conducted on the expectation that students possess the skills needed to succeed in the courses. Therefore, placement criteria should be established carefully so as to allow students the opportunity to demonstrate these skills. Similarly, exit criteria from remedial programs should be developed to assure that students are entering college-level courses with the skills they need to succeed. Whatever level of skills proficiency a college determines for entrance into a college-level course should apply equally to students who are initially placed in that course and to students who come to the course by way of a remedial program.

Exit-testing (i.e., at the end of the last remedial course) is currently being reported for only 63 percent of remedial programs. The Council recommends that all public colleges employ exit-testing for their remedial programs. Appropriate standardized tests such as the NJCBSPT should be used. If tests other than the NJCBSPT are used for post-testing, equating with the NJCBSPT should be done.

The Council's intent in collecting exit-test results is to assess programs, not individual students. Towards this end, a college could opt to test all exiting remedial students or a random, representative sample.

- Institutional Self Assessments

  To date most institutions provide their remedial outcomes data without explicitly attempting to assess the status of their programs. In the future, the Council's reporting guidelines will ask each college to provide narrative that assesses its remedial programs' strengths and weaknesses, both in light of data from comparable institutions and in the context of program development over time.

- Consultative Assistance to Remedial Programs

  The Council will expand its current site visit program, which to date has sought to observe noteworthy programs, to offer consultations to those programs seeking assistance or review. Further, the Council recommends that funds be made available to provide options for consultative assistance to those institutions whose remedial program or program components need improvement.

- State-wide Faculty Networks

  Faculty teaching basic reading, writing and mathematics courses should have access to the latest research on effective teaching methods. The Council recommends that the Board of Higher Education foster statewide networks designed to collect and exchange information on pedagogical methods.

o **Local Research Efforts**

The Council's guidelines for the preparation of institutional effectiveness reports should be viewed as minimum evaluation requirements. The Council urges colleges to conduct local research efforts that focus on areas needing improvement; serve to advance the effectiveness of student learning in established programs; and evaluate patterns over time that could reveal more about the strengths and weaknesses of individual programs. The Council would welcome the receipt of such reports from institutions for the purpose of sharing information among colleges.

# REFERENCES

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Sullivan, J.L. and Feldman, S. Multiple Indicators. Beverly Hills, California: Sage Publications, 1979.

## DATA TABLES

Key to Symbols and Abbreviations Used:

| | |
|---|---|
| -- | Not applicable, either for reasons indicated via footnote (e.g., institution lacks a course in the particular skill area, only part-time students are tested and tracked by an institution) or as a logical consequence of other data (e.g., retention rate was zero, no students were identified for remediation in a particular study group, etc.). |
| N/A | Literally, "no account." Data not available (institution did not furnish data). |

## TABLE 1

### NUMBER ENROLLED AND PERCENTAGE PASSING FINAL LEVEL OF REMEDIATION
FALL 1983 THROUGH SPRING 1985
FULL-TIME STUDENTS, BY COLLEGE
ENTERING FALL 1983

| | READING | | WRITING | | COMPUTATION | | ELEMENTARY ALGEBRA | |
|---|---|---|---|---|---|---|---|---|
| COUNTY COLLEGES | N | % | N | % | N | % | N | % |
| Atlantic | 168 | 80 | 109 | 81 | 167 | 70 | --[1] | -- |
| Bergen | 667[2] | 85 | 308 | 59 | 1130 | 73 | 897 | 63 |
| Brookdale | 369 | 75 | 303 | 80 | 412 | 69 | 403 | 62 |
| Burlington | 245 | 78 | 381 | 80 | 240 | 81 | 146 | 74 |
| Camden | 339 | 67 | 416 | 64 | 445 | 59 | 466 | 61 |
| Cumberland | 96 | 73 | 132 | 87 | 113 | 65 | 122 | 77 |
| Essex | 119 | 69 | 348 | 59 | 319 | 55 | 318 | 51 |
| Gloucester | 96 | 76 | 209 | 74 | 253 | 69 | N/A | N/A |
| Hudson | 182 | 67 | 170 | 68 | 146 | 56 | 77 | 67 |
| Mercer | 577 | 82 | 634 | 83 | 614 | 72 | 643 | 73 |
| Middlesex | 759 | 77 | 666 | 69 | 987 | 69 | 180 | 84 |
| Morris | 334 | 78 | 388 | 75 | 255 | 57 | 185 | 38 |
| Ocean[3] | 283 | 73 | 159 | 79 | 281 | 69 | 5 | 50 |
| Passaic[4] | 90 | 53 | 116 | 72 | 52 | 79 | 10 | 80 |
| Salem | 91 | 67 | 80 | 72 | 95 | 66 | 87 | 76 |
| Somerset | 62 | 96 | 194 | 79 | --[5] | -- | 374 | 64 |
| Sussex[6] | -- | -- | -- | -- | -- | -- | -- | -- |
| Union | 530 | 61 | 474 | 65 | 497 | 66 | 169 | 66 |
| Warren | 4[2] | 100 | --[7] | -- | 6 | 84 | 0 | -- |
| County College Total/ Average % | 5011 | 75 | 5087 | 72 | 6012 | 68 | 4082 | 65 |

## TABLE 2

## NUMBER ENROLLED AND PERCENTAGE PASSING FINAL LEVEL OF REMEDIATION
FALL 1983 THROUGH SPRING 1985
FULL-TIME STUDENTS, BY COLLEGE
ENTERING FALL 1983

| | READING | | WRITING | | COMPUTATION | | ELEMENTARY ALGEBRA | |
|---|---|---|---|---|---|---|---|---|
| | N | % | N | % | N | % | N | % |
| **STATE COLLEGES** | | | | | | | | |
| Glassboro | 407 | 80 | 313 | 83 | 322 | 87 | 626 | 84 |
| Jersey City | 166 | 84 | 210 | 64 | 202 | 85 | 153 | 80 |
| Kean | 258 | 81 | 331 | 75 | --[1] | -- | 329 | 70 |
| Montclair | 393 | 98 | 152 | 92 | 251 | 92 | 741[2] | 93 |
| Ramapo | 104 | 81 | 125 | 77 | 41 | 66 | 113 | 73 |
| Stockton | 308[3] | 90 | 379 | 91 | 274[4] | 88 | --[5] | -- |
| Trenton | 233 | 90 | 310 | 92 | 258 | 78 | 391 | 77 |
| William Paterson | 269 | 87 | 480 | 91 | 280 | 89 | 124 | 77 |
| Thomas Edison[6] | -- | -- | -- | -- | -- | -- | -- | -- |
| State College Total/Average % | 2138 | 87 | 2300 | 85 | 1628 | 86 | 2477 | 83 |
| **NJIT** | 49[7] | 71 | 76 | 95 | --[1] | -- | 207[8] | 85 |
| **RUTGERS UNIVERSITY** | | | | | | | | |
| Camden | 63 | 97 | 27 | 78 | --[1] | -- | 38 | 82 |
| Newark | 105[7] | 82 | --[9] | -- | --[1] | -- | 109 | 84 |
| New Brunswick | 317 | 81 | 538 | 93 | --[1] | -- | 317 | 72 |
| Rutgers University Total/Average % | 485 | 84 | 565 | 92 | --[1] | -- | 464 | 75 |

## TABLE 3

## NUMBER ENROLLED AND PERCENTAGE PASSING FINAL LEVEL OF REMEDIATION
FALL 1983 THROUGH SPRING 1985
PART-TIME STUDENTS, BY COLLEGE
ENTERING FALL 1983

| | READING | | WRITING | | COMPUTATION | | ELEMENTARY ALGEBRA | |
|---|---|---|---|---|---|---|---|---|
| COUNTY COLLEGES | N | % | N | % | N | % | N | % |
| Atlantic | 100 | 70 | 85 | 62 | 91 | 67 | --[1] | -- |
| Bergen | 141[2] | 71 | 46 | 61 | 281 | 72 | 218 | 68 |
| Brookdale | 145 | 68 | 113 | 66 | 172 | 73 | 129 | 67 |
| Burlington | 46 | 76 | 103 | 61 | 49 | 92 | 41 | 93 |
| Camden | 185 | 62 | 224 | 58 | 273 | 61 | 313 | 60 |
| Cumberland | 23 | 78 | 38 | 79 | 33 | 73 | 53 | 66 |
| Essex | 6 | 83 | 39 | 80 | 51 | 63 | 39 | 75 |
| Gloucester | 12 | 83 | 42 | 67 | 64 | 72 | N/A | N/A |
| Hudson | 96 | 73 | 70 | 67 | 63 | 67 | 30 | 60 |
| Mercer | 144 | 82 | 199 | 75 | 208 | 70 | 234 | 79 |
| Middlesex | 81 | 90 | 116 | 73 | 197 | 72 | --[3] | -- |
| Morris | 2 | 50 | 6 | 50 | 1 | 0 | 5 | 40 |
| Ocean[4] | 32 | 63 | 26 | 77 | 39 | 74 | 1 | 100 |
| Passaic[5] | 29 | 69 | 58 | 64 | 18 | 83 | 5 | 29 |
| Salem | 18 | 67 | 18 | 83 | 36 | 64 | 25 | 60 |
| Somerset | 59 | 84 | 90 | 72 | --[6] | -- | 168 | 72 |
| Sussex | 21[2] | 97 | --[7] | -- | --[6] | -- | 33[8] | 95 |
| Union | 101 | 60 | 87 | 59 | 111 | 68 | 32 | 72 |
| Warren | 1[2] | 100 | --[9] | -- | 1 | 100 | 0 | -- |
| County College Total/ Average % | 1242 | 72 | 1360 | 67 | 1688 | 70 | 1326 | 70 |

## TABLE 4

## NUMBER ENROLLED AND PERCENTAGE PASSING FINAL LEVEL OF REMEDIATION
FALL 1983 THROUGH SPRING 1985
PART-TIME STUDENTS, BY COLLEGE
ENTERING FALL 1983

| | READING | | WRITING | | COMPUTATION | | ELEMENTARY ALGEBRA | |
|---|---|---|---|---|---|---|---|---|
| | N | % | N | % | N | % | N | % |
| STATE COLLEGES | | | | | | | | |
| Glassboro | 17 | 81 | 14 | 57 | 21 | 100 | 18 | 79 |
| Jersey City | 34 | 79 | 106 | 50 | 72 | 70 | 42 | 60 |
| Kean | 102 | 79 | 113 | 80 | --[1] | -- | 148 | 64 |
| Montclair | 205 | 89 | 61 | 84 | 184 | 86 | 234 | 85 |
| Ramapo | 36 | 100 | 31 | 92 | 18 | 100 | 32 | 83 |
| Stockton | 3[2] | 100 | 3 | 33 | 3[3] | 100 | --[4] | -- |
| Trenton | 0 | -- | 0 | -- | 0 | -- | 0 | -- |
| William Paterson | 35 | 89 | 67 | 88 | 46 | 98 | 16 | 88 |
| Thomas Edison | 2 | 100 | 3 | 100 | 0 | -- | 4 | 100 |
| State College Total/Average % | 434 | 86 | 398 | 74 | 344 | 86 | 494 | 77 |
| NJIT | -- | -- | -- | -- | --[1] | -- | -- | -- |
| RUTGERS UNIVERSITY | | | | | | | | |
| Camden | 0 | -- | -- | -- | --[1] | -- | -- | -- |
| Newark | 14[5] | 50 | --[6] | -- | --[1] | -- | 13 | 77 |
| New Brunswick | 2 | 50 | 5 | 60 | --[1] | -- | 15 | 73 |
| Rutgers University Total/Average % | 16 | 50 | 5 | 60 | --[1] | -- | 28 | 75 |

## TABLE 5

### RETENTION RATES FOR FALL 1983 ENTERING, FULL-TIME STUDENTS ACCORDING TO NEED FOR REMEDIATION IN READING, BY COLLEGE CUMULATIVE THROUGH SPRING 1985

| | NO REMEDIATION * | | COMPLETED REMEDIATION* | | DID NOT COMPLETE REMEDIATION * | |
|---|---|---|---|---|---|---|
| | (N) | Retention | (N) | Retention | (N) | Retention |
| **COUNTY COLLEGES** | | | | | | |
| Atlantic | 253 | 52 | 135 | 53 | 103 | 29 |
| Bergen [1] | 1169 | 47 | 564 | 51 | 187 | 10 |
| Brookdale | 593 | 49 | 277 | 48 | 155 | 26 |
| Burlington | 262 | 44 | 191 | 54 | 193 | 36 |
| Camden | 927 | 42 | 293 | 55 | 367 | 18 |
| Cumberland | 165 | 48 | 83 | 45 | 40 | 18 |
| Essex | 146 | 23 | 82 | 48 | 478 | 28 |
| Gloucester | 503 | 50 | 74 | 57 | 34 | 18 |
| Hudson | 134 | 36 | 117 | 62 | 194 | 0[2] |
| Mercer | 895 | 53 | 496 | 54 | 188 | 12 |
| Middlesex | 1461 | 53 | 614 | 58 | 201 | 7 |
| Morris | 1275 | 64 | 259 | 64 | 146 | 13 |
| Ocean [3] | 620 | 60 | 221 | 64 | 173 | 27 |
| Passaic | 63 | 30 | 91 | 52 | 191 | 7 |
| Salem | 175 | 48 | 62 | 65 | 56 | 70 |
| Somerset | 524 | 41 | 140 | 54 | 51 | 4 |
| Sussex [4] | -- | -- | -- | -- | -- | -- |
| Union | 620 | 54 | 321 | 62 | 260 | 18 |
| Warren [1] | 79 | N/A | 4 | 50 | 0 | -- |
| County College Total/Average % | 9964 | 51 | 4024 | 56 | 3017 | 19 |
| **STATE COLLEGES** | | | | | | |
| Glassboro | 736 | 70 | 327 | 72 | 86 | 40 |
| Jersey City | 325 | 57 | 139 | 67 | 129 | 41 |
| Kean | 717 | 66 | 229 | 76 | 57 | 28 |
| Montclair | 1124 | 75 | 460 | 76 | 28 | 11 |
| Ramapo | 264 | 36 | 140 | 63 | 33 | 52 |
| Stockton [5] | 497 | 71 | 284 | 72 | 24 | 0 |
| Trenton | 794 | 77 | 155 | 70 | 27 | 33 |
| Wm. Paterson | 919 | 67 | 226 | 74 | 103 | 36 |
| Thomas Edison [6] | 46 | 43 | 3 | 67 | 2 | 0 |
| State College Total/Average % | 5422 | 68 | 1963 | 72 | 489 | 35 |
| **NJIT** [1] | 533 | 63 | 35 | 57 | 14 | 43 |
| **RUTGERS UNIVERSITY**[7] | | | | | | |
| Camden | 247 | 75 | 85[8] | 64[8] | 10[8] | 50[8] |
| Newark [1] | 502 | 79 | 82 | 85 | 27 | 33 |
| New Brunswick | 3931 | 88 | 268 | 83 | 245 | 73 |
| Rutgers University Total/Average % | 4680 | 86 | 435 | 80 | 282 | 68 |

## TABLE 6

## RETENTION RATES FOR FALL 1983 ENTERING, FULL-TIME STUDENTS ACCORDING TO NEED FOR REMEDIATION IN WRITING, BY COLLEGE CUMULATIVE THROUGH SPRING 1985

| | NO REMEDIATION* | | COMPLETED REMEDIATION* | | DID NOT COMPLETE REMEDIATION* | |
|---|---|---|---|---|---|---|
| | (N) | Retention | (N) | Retention | (N) | Retention |
| **COUNTY COLLEGES** | | | | | | |
| Atlantic | 376 | 52 | 88 | 45 | 27 | 19 |
| Bergen | 833 | 49 | 175 | 59 | 140 | 18 |
| Brookdale | 821 | 50 | 241 | 44 | 87 | 13 |
| Burlington | 240 | 45 | 306 | 53 | 100 | 16 |
| Camden | 830 | 40 | 365 | 62 | 444 | 14 |
| Cumberland | 144 | 49 | 121 | 43 | 11 | 9 |
| Essex | 194 | 15 | 206 | 45 | 306 | 20 |
| Gloucester | 392 | 51 | 154 | 57 | 65 | 14 |
| Hudson | 139 | 35 | 100 | 56 | 206 | 7 |
| Mercer | 895 | 53 | 538 | 52 | 148 | 10 |
| Middlesex | 1574 | 53 | 483 | 60 | 219 | 11 |
| Morris | 1284 | 63 | 289 | 58 | 107 | 22 |
| Ocean[1] | 832 | 57 | 135 | 57 | 47 | 19 |
| Passaic | 32 | 22 | 126 | 42 | 182 | 8 |
| Salem | 172 | 51 | 58 | 69 | 56 | 13 |
| Somerset | 543 | 43 | 159 | 41 | 7 | 0 |
| Sussex[2] | -- | -- | -- | -- | -- | -- |
| Union | 676 | 53 | 309 | 61 | 216 | 20 |
| Warren[3] | -- | -- | -- | -- | -- | -- |
| County College Total/Average % | 9977 | 51 | 3853 | 54 | 2368 | 14 |
| **STATE COLLEGES** | | | | | | |
| Glassboro | 827 | 68 | 260 | 76 | 62 | 27 |
| Jersey City | 382 | 57 | 134 | 69 | 77 | 29 |
| Kean | 656 | 65 | 284 | 79 | 63 | 19 |
| Montclair | 1456 | 75 | 142 | 63 | 14 | 0 |
| Ramapo | 206 | 34 | 157 | 62 | 74 | 15 |
| Stockton | 426 | 71 | 352 | 72 | 27 | 0 |
| Trenton | 589 | 90 | 252 | 75 | 35 | 46 |
| Wm. Paterson | 691 | 68 | 460 | 67 | 97 | 39 |
| Thomas Edison[4] | 43 | 49 | 3 | 33 | 5 | 0 |
| State College Total/Average % | 5376 | 71 | 2044 | 71 | 454 | 26 |
| **NJIT** | 506 | 63 | 72 | 60 | 4 | 0 |
| **RUTGERS UNIVERSITY[5]** | | | | | | |
| Camden | 269 | 74 | 61[6] | 66 | 12[6] | 42[6] |
| Newark[3] | -- | -- | -- | -- | -- | -- |
| New Brunswick | 3830 | 87 | 544 | 86 | 70 | 34 |
| Rutgers University Total/Average % | 4099 | 87 | 505 | 84 | 82 | 35 |

## TABLE 7

## RETENTION RATES FOR FALL 1983 ENTERING, FULL-TIME STUDENTS ACCORDING TO NEED FOR REMEDIATION IN COMPUTATION, BY COLLEGE CUMULATIVE THROUGH SPRING 1985

| | NO REMEDIATION * | | COMPLETED REMEDIATION* | | DID NOT COMPLETE REMEDIATION * | |
|---|---|---|---|---|---|---|
| | (N) | Retention | (N) | Retention | (N) | Retention |
| **COUNTY COLLEGES** | | | | | | |
| Atlantic | 231 | 50 | 113 | 62 | 159 | 42 |
| Bergen | 690 | 51 | 821 | 53 | 409 | 16 |
| Brookdale | 572 | 51 | 253 | 63 | 284 | 19 |
| Burlington | 256 | 52 | 195 | 52 | 195 | 27 |
| Camden | 874 | 46 | 280 | 55 | 442 | 12 |
| Cumberland | 175 | 50 | 73 | 41 | 41 | 22 |
| Essex | 78 | 44 | 176 | 43 | 452 | 22 |
| Gloucester | 348 | 49 | 173 | 68 | 90 | 12 |
| Hudson | 126 | 35 | 78 | 47 | 239 | 15 |
| Mercer | 926 | 55 | 448 | 54 | 204 | 8 |
| Middlesex | 1190 | 55 | 738 | 61 | 348 | 11 |
| Morris | 1407 | 63 | 145 | 63 | 128 | 24 |
| Ocean[1] | 628 | 61 | 209 | 63 | 177 | 24 |
| Passaic | 4 | 75 | 119 | 49 | 111 | 11 |
| Salem | 185 | 50 | 61 | 57 | 47 | 15 |
| Somerset [2] | -- | -- | -- | -- | -- | -- |
| Sussex[3] | -- | -- | -- | -- | -- | -- |
| Union | 560 | 55 | 326 | 51 | 315 | 32 |
| Warren | 87 | N/A | 5 | 20 | 1 | 0 |
| County College Total/Average % | 8337 | 54 | 4213 | 56 | 3642 | 19 |
| **STATE COLLEGES** | | | | | | |
| Glassboro | 778 | 70 | 279 | 73 | 92 | 33 |
| Jersey City | 278 | 61 | 172 | 60 | 143 | 36 |
| Kean [4] | -- | -- | -- | -- | -- | -- |
| Montclair | 1350 | 76 | 236 | 70 | 26 | 8 |
| Ramapo | 375 | 40 | 43 | 53 | 19 | 11 |
| Stockton [5] | 531 | 69 | 257 | 74 | 17 | 0 |
| Trenton | 702 | 76 | 201 | 81 | 73 | 41 |
| Wm. Paterson | 920 | 64 | 240 | 74 | 88 | 53 |
| Thomas Edison[6] | 38 | 53 | 9 | 22 | 4 | 0 |
| State College Total/Average % | 4972 | 68 | 1437 | 72 | 462 | 35 |
| **NJIT** [4] | -- | -- | -- | -- | -- | -- |
| **RUTGERS UNIVERSITY**[4] | | | | | | |
| Camden | -- | -- | -- | -- | -- | -- |
| Newark | -- | -- | -- | -- | -- | -- |
| New Brunswick | -- | -- | -- | -- | -- | -- |
| Rutgers University Total/Average % | -- | -- | -- | -- | -- | -- |

## TABLE 8

## RETENTION RATES FOR FALL 1983 ENTERING, FULL-TIME STUDENTS ACCORDING TO NEED FOR REMEDIATION IN ELEMENTARY ALGEBRA, BY COLLEGE CUMULATIVE THROUGH SPRING 1985

| | NO REMEDIATION * | | COMPLETED REMEDIATION* | | DID NOT COMPLETE REMEDIATION * | |
|---|---|---|---|---|---|---|
| | (N) | Retention | (N) | Retention | (N) | Retention |
| COUNTY COLLEGES | | | | | | |
| Atlantic[1] | -- | -- | -- | -- | -- | -- |
| Bergen | 203 | 42 | 531 | 71 | 1186 | 33 |
| Brookdale | 295 | 56 | 251 | 69 | 545 | 31 |
| Burlington | 166 | 54 | 108 | 63 | 279 | 32 |
| Camden | 709 | 30 | 361 | 66 | 708 | 21 |
| Cumberland | 97 | 61 | 53 | 49 | 13 | 54 |
| Essex | 49 | 45 | 160 | 49 | 497 | 19 |
| Gloucester[2] | N/A | N/A | N/A | N/A | N/A | N/A |
| Hudson | 35 | 43 | 39 | 44 | 153 | 23 |
| Mercer | 694 | 57 | 483 | 61 | 401 | 18 |
| Middlesex | 413 | 62 | 158 | 53 | 90 | 22 |
| Morris | 1486 | 60 | 71 | 69 | 123 | 50 |
| Ocean[3] | 244 | 62 | 3 | 0 | 9 | 22 |
| Passaic | 4 | 0 | 8 | 25 | 4 | 75 |
| Salem[4] | 175 | 40 | 52 | 62 | 12 | 25 |
| Somerset | 353 | 51 | 241 | 41 | 161 | 7 |
| Sussex[5] | -- | -- | -- | -- | -- | -- |
| Union | 380 | 56 | 111 | 52 | 69 | 35 |
| Warren | 80 | N/A | 0 | -- | 0 | -- |
| County College Total/Average % | 5383 | 53 | 2630 | 61 | 4250 | 27 |
| STATE COLLEGES | | | | | | |
| Glassboro | 459 | 70 | 527 | 77 | 163 | 34 |
| Jersey City | 116 | 67 | 122 | 67 | 40 | 25 |
| Kean | 634 | 70 | 261 | 70 | 78 | 18 |
| Montclair | 609 | 76 | 730 | 72 | 27 | 44 |
| Ramapo | 106 | 37 | 136 | 69 | 195 | 12 |
| Stockton[1] | -- | -- | -- | -- | -- | -- |
| Trenton | 565 | 78 | 303 | 80 | 108 | 41 |
| Wm. Paterson | 1054 | 68 | 113 | 51 | 81 | 35 |
| Thomas Edison[6] | 12 | 58 | 30 | 23 | 9 | 89 |
| State College Total/Average % | 3585 | 71 | 2222 | 72 | 701 | 28 |
| NJIT[7] | 369 | 68 | 175 | 61 | 38 | 11 |
| RUTGERS UNIVERSITY | | | | | | |
| Camden | 279 | 75 | 32 | 63 | 31 | 55 |
| Newark | 492 | 78 | 94 | 88 | 21 | 33 |
| New Brunswick | 3775 | 88 | 229 | 89 | 432 | 72 |
| Rutgers University Total/Average % | 4546 | 86 | 355 | 85 | 484 | 69 |

## TABLE 9

## MEAN CREDITS EARNED FOR FALL 1983 ENTERING STUDENTS ACCORDING TO NEED FOR REMEDIATION IN READING, BY COLLEGE CUMULATIVE THROUGH SPRING 1985

| | NO REMEDIATION* | | COMPLETED REMEDIATION* | | DID NOT COMPLETE REMEDIATION* | |
|---|---|---|---|---|---|---|
| | (N) | Mean Credits Earned | (N) | Mean Credits Earned | (N) | Mean Credits Earned |
| **COUNTY COLLEGES** | | | | | | |
| Atlantic | 132 | 45 | 72 | 35 | 30 | N/A |
| Bergen [1] | 547 | 42 | 287 | 31 | 19 | 12 |
| Brookdale | 339 | 40 | 134 | 29 | 40 | 31 |
| Burlington | 114 | 47 | 104 | 34 | 70 | 31 |
| Camden | 388 | 46 | 160 | 31 | 67 | 31 |
| Cumberland | 80 | 46 | 37 | 42 | 7 | 45 |
| Essex | 34 | 41 | 39 | 26 | 133 | 31 |
| Gloucester | 250 | 49 | 42 | 28 | 6 | 18 |
| Hudson | 48 | 46 | 72 | 19 | -- [2] | -- |
| Mercer | 477 | 30 | 267 | 25 | 22 | 7 |
| Middlesex | 772 | 47 | 357 | 40 | 15 | 17 |
| Morris | 821 | 44 | 166 | 37 | 19 | 18 |
| Ocean [3] | 371 | 51 | 141 | 40 | 46 | 31 |
| Passaic | 19 | 34 | 47 | 18 | 13 | 12 |
| Salem | 84 | 53 | 40 | 43 | 39 | 43 |
| Somerset | 215 | 53 | 75 | 44 | 2 | 53 |
| Sussex [4] | -- | -- | -- | -- | -- | -- |
| Union | 334 | 42 | 198 | 27 | 48 | 28 |
| Warren [1] | N/A | N/A | 2 | 34 | -- | -- |
| County College Total/Average | 5025 | 44 | 2240 | 32 | 576 | 29 |
| **STATE COLLEGES** | | | | | | |
| Glassboro | 512 | 53 | 235 | 45 | 34 | 38 |
| Jersey City | 184 | 48 | 93 | 45 | 53 | 43 |
| Kean | 470 | 50 | 173 | 43 | 16 | 35 |
| Montclair | 841 | 56 | 348 | 50 | 3 | 51 |
| Ramapo | 95 | 53 | 65 | 44 | 17 | 41 |
| Stockton [5] | 351 | 56 | 205 | 52 | 0 | -- |
| Trenton | 611 | 51 | 108 | 46 | 9 | 21 |
| Wm. Paterson | 614 | 45 | 167 | 34 | 37 | 37 |
| Thomas Edison [6] | 20 | -- | 2 | -- | 0 | -- |
| State College Total/Average | 3698 | 51 | 1396 | 46 | 169 | 38 |
| **NJIT** [1] | 336 | 58 | 20 | 55 | 6 | 48 |
| **RUTGERS UNIVERSITY** [7] | | | | | | |
| Camden | 186 | 57 | 54 [8] | 56 | 5 [8] | 52 [8] |
| Newark [1] | 396 | 55 | 70 | 48 | 9 | 34 |
| New Brunswick | 3440 | 56 | 223 | 47 | 179 | 50 |
| Rutgers University Total/Average | 4022 | 56 | 347 | 48 | 193 | 49 |

## TABLE 10

## MEAN CREDITS EARNED FOR FALL 1983 ENTERING STUDENTS ACCORDING TO NEED FOR REMEDIATION IN WRITING, BY COLLEGE CUMULATIVE THROUGH SPRING 1985

| | NO REMEDIATION* | | COMPLETED REMEDIATION* | | DID NOT COMPLETE REMEDIATION* | |
|---|---|---|---|---|---|---|
| | (N) | Mean Credits Earned | (N) | Mean Credits Earned | (N) | Mean Credits Earned |
| COUNTY COLLEGES | | | | | | |
| Atlantic | 195 | 43 | 40 | 34 | 5 | N/A |
| Bergen | 407 | 42 | 104 | 42 | 25 | 28 |
| Brookdale | 407 | 39 | 106 | 28 | 11 | 17 |
| Burlington | 109 | 47 | 163 | 35 | 16 | 14 |
| Camden | 330 | 48 | 225 | 33 | 63 | 28 |
| Cumberland | 71 | 49 | 52 | 45 | 1 | -- |
| Essex | 30 | 45 | 93 | 27 | 61 | 30 |
| Gloucester | 201 | 51 | 88 | 36 | 9 | 13 |
| Hudson | 49 | 46 | 56 | 19 | 15 | 12 |
| Mercer | 474 | 29 | 279 | 25 | 15 | 9 |
| Middlesex | 829 | 47 | 290 | 38 | 25 | 11 |
| Morris | 814 | 45 | 168 | 37 | 24 | 14 |
| Ocean[1] | 472 | 49 | 77 | 32 | 9 | 22 |
| Passaic | 7 | 40 | 53 | 23 | 14 | 6 |
| Salem | 87 | 53 | 40 | 45 | 7 | 26 |
| Somerset | 232 | 53 | 65 | 44 | 0 | -- |
| Sussex[2] | -- | -- | -- | -- | -- | -- |
| Union | 357 | 42 | 187 | 26 | 43 | 25 |
| Warren[3] | -- | -- | -- | -- | -- | -- |
| County College Total/Average | 5071 | 44 | 2086 | 33 | 343 | 22 |
| STATE COLLEGES | | | | | | |
| Glassboro | 565 | 53 | 198 | 43 | 17 | 36 |
| Jersey City | 216 | 48 | 93 | 47 | 22 | 40 |
| Kean | 424 | 51 | 223 | 43 | 12 | 31 |
| Montclair | 1102 | 55 | 90 | 43 | 0 | -- |
| Ramapo | 71 | 53 | 97 | 47 | 12 | 38 |
| Stockton | 301 | 55 | 255 | 54 | 0 | -- |
| Trenton | 622 | 51 | 190 | 49 | 16 | 31 |
| Wm. Paterson | 471 | 46 | 309 | 37 | 38 | 39 |
| Thomas Edison[4] | 21 | -- | 1 | -- | 0 | -- |
| State College Total/Average | 3793 | 52 | 1455 | 45 | 117 | 37 |
| NJIT | 319 | 58 | 43 | 53 | 0 | -- |
| RUTGERS UNIVERSITY[5] | | | | | | |
| Camden | 200 | 57 | 40[6] | 57 | 5[6] | 52[6] |
| Newark[3] | -- | -- | -- | -- | -- | -- |
| New Brunswick | 3348 | 57 | 470 | 49 | 24 | 42 |
| Rutgers University Total/Average | 3548 | 57 | 510 | 49 | 29 | 43 |

## TABLE 11

## MEAN CREDITS EARNED FOR FALL 1983 ENTERING STUDENTS ACCORDING TO NEED FOR REMEDIATION IN COMPUTATION, BY COLLEGE CUMULATIVE THROUGH SPRING 1985

| | NO REMEDIATION* | | COMPLETED REMEDIATION * | | DID NOT COMPLETE REMEDIATION * | |
|---|---|---|---|---|---|---|
| | (N) | Mean Credits Earned | (N) | Mean Credits Earned | (N) | Mean Credits Earned |
| COUNTY COLLEGES | | | | | | |
| Atlantic | 116 | 47 | 70 | 35 | 66 | N/A |
| Bergen | 353 | 42 | 436 | 36 | 64 | 22 |
| Brookdale | 293 | 40 | 159 | 32 | 55 | 25 |
| Burlington | 134 | 44 | 102 | 32 | 52 | 39 |
| Camden | 400 | 45 | 153 | 30 | 51 | 31 |
| Cumberland | 87 | 45 | 30 | 44 | 9 | 51 |
| Essex | 34 | 46 | 75 | 27 | 98 | 31 |
| Gloucester | 169 | 51 | 118 | 40 | 11 | 18 |
| Hudson | 44 | 44 | 37 | 22 | 39 | 21 |
| Mercer | 507 | 29 | 241 | 24 | 17 | 12 |
| Middlesex | 654 | 48 | 453 | 41 | 37 | 16 |
| Morris | 884 | 44 | 91 | 38 | 31 | 27 |
| Ocean[1] | 384 | 51 | 131 | 39 | 43 | 35 |
| Passaic | 3 | 32 | 58 | 20 | 12 | 21 |
| Salem | 92 | 54 | 35 | 40 | 7 | 25 |
| Somerset[2] | -- | -- | -- | -- | -- | -- |
| Sussex[3] | -- | -- | -- | -- | -- | -- |
| Union | 309 | 41 | 165 | 30 | 101 | 29 |
| Warren | N/A | N/A | 1 | 35 | 0 | -- |
| County College Total/Average | 4463 | 44 | 2355 | 34 | 693 | 28 |
| STATE COLLEGES | | | | | | |
| Glassboro | 548 | 52 | 203 | 45 | 30 | 40 |
| Jersey City | 170 | 50 | 104 | 46 | 52 | 42 |
| Kean[4] | -- | -- | -- | -- | -- | -- |
| Montclair | 1024 | 55 | 166 | 49 | 2 | 33 |
| Ramapo | 150 | 49 | 23 | 43 | 2 | 40 |
| Stockton[5] | 365 | 56 | 191 | 52 | 0 | -- |
| Trenton | 535 | 51 | 163 | 52 | 30 | 30 |
| Wm. Paterson | 593 | 44 | 178 | 36 | 47 | 35 |
| Thomas Edison[6] | 20 | -- | 2 | -- | 0 | -- |
| State College Total/Average | 3405 | 51 | 1030 | 47 | 163 | 37 |
| NJIT[4] | -- | -- | -- | -- | -- | -- |
| RUTGERS UNIVERSITY[4] | | | | | | |
| Camden | -- | -- | -- | -- | -- | -- |
| Newark | -- | -- | -- | -- | -- | -- |
| New Brunswick | -- | -- | -- | -- | -- | -- |
| Rutgers University Total/Average | -- | -- | -- | -- | -- | -- |

## TABLE 12

## MEAN CREDITS EARNED FOR FALL 1983 ENTERING STUDENTS ACCORDING TO NEED FOR REMEDIATION IN **ELEMENTARY ALGEBRA**, BY COLLEGE CUMULATIVE THROUGH SPRING 1985

|  | NO REMEDIATION* |  | COMPLETED REMEDIATION * |  | DID NOT COMPLETE REMEDIATION * |  |
|---|---|---|---|---|---|---|
|  | (N) | Mean Credits Earned | (N) | Mean Credits Earned | (N) | Mean Credits Earned |
| COUNTY COLLEGES |  |  |  |  |  |  |
| Atlantic[1] | -- | -- | -- | -- | -- | -- |
| Bergen | 86 | 42 | 378 | 40 | 389 | 34 |
| Brookdale | 164 | 41 | 174 | 41 | 170 | 29 |
| Burlington | 99 | 46 | 68 | 34 | 89 | 36 |
| Camden | 210 | 48 | 237 | 35 | 152 | 37 |
| Cumberland | 59 | 48 | 26 | 45 | 7 | 42 |
| Essex | 22 | 50 | 78 | 30 | 96 | 29 |
| Gloucester[2] | N/A | N/A | N/A | N/A | N/A | N/A |
| Hudson | 15 | 37 | 17 | 23 | 35 | 27 |
| Mercer | 395 | 30 | 296 | 27 | 74 | 13 |
| Middlesex | 257 | 48 | 83 | 34 | 20 | 21 |
| Morris | 895 | 43 | 49 | 45 | 62 | 32 |
| Ocean[3] | 151 | 52 | 0 | -- | 2 | 29 |
| Passaic | 0 | -- | 2 | 41 | 3 | 37 |
| Salem[4] | 70 | 46 | 32 | 48 | 3 | 32 |
| Somerset | 180 | 53 | 99 | 47 | 12 | 27 |
| Sussex[5] | -- | -- | -- | -- | -- | -- |
| Union | 213 | 46 | 69 | 32 | 24 | 29 |
| Warren | N/A | N/A | -- | -- | -- | -- |
| County College Total/Average | 2806 | 43 | 1608 | 36 | 1138 | 31 |
| STATE COLLEGES |  |  |  |  |  |  |
| Glassboro | 321 | 54 | 404 | 49 | 56 | 36 |
| Jersey City | 78 | 50 | 82 | 51 | 10 | 48 |
| Kean | 462 | 50 | 183 | 42 | 14 | 38 |
| Montclair | 461 | 58 | 522 | 51 | 12 | 35 |
| Ramapo | 39 | 53 | 94 | 49 | 23 | 44 |
| Stockton[1] | -- | -- | -- | -- | -- | -- |
| Trenton | 443 | 53 | 241 | 50 | 44 | 29 |
| Wm. Paterson | 720 | 43 | 69 | 38 | 29 | 31 |
| Thomas Edison[6] | 7 | -- | 7 | -- | 8 | -- |
| State College Total/Average | 2531 | 51 | 1602 | 48 | 196 | 35 |
| NJIT[7] | 252 | 60 | 106 | 51 | 4 | 57 |
| RUTGERS UNIVERSITY |  |  |  |  |  |  |
| Camden | 208 | 57 | 20 | 54 | 17 | 56 |
| Newark | 385 | 54 | 83 | 52 | 7 | 40 |
| New Brunswick | 3319 | 57 | 203 | 47 | 312 | 50 |
| Rutgers University Total/Average | 3912 | 56 | 306 | 49 | 336 | 50 |

## TABLE 13

## MEAN CREDITS EARNED FOR FALL 1983 ENTERING STUDENTS ACCORDING TO NEED FOR REMEDIATION IN READING, BY COLLEGE SPRING 1985 TERM

| | NO REMEDIATION * | | COMPLETED REMEDIATION * | | DID NOT COMPLETE REMEDIATION * | |
|---|---|---|---|---|---|---|
| | (N) | Mean Credits Earned | (N) | Mean Credits Earned | (N) | Mean Credits Earned |
| **COUNTY COLLEGES** | | | | | | |
| Atlantic | 132 | 10 | 72 | 9 | 30 | N/A |
| Bergen [1] | 547 | 9 | 287 | 8 | 19 | 4 |
| Brookdale | 339 | 9 | 134 | 7 | 40 | 7 |
| Burlington | 114 | 10 | 104 | 9 | 70 | 7 |
| Camden | 388 | 10 | 160 | 7 | 67 | 7 |
| Cumberland | 80 | 10 | 37 | 10 | 7 | 10 |
| Essex | 34 | 10 | 39 | 9 | 133 | 8 |
| Gloucester | 250 | 12 | 42 | 9 | 6 | 8 |
| Hudson | 48 | 11 | 72 | 8 | 0[2] | -- |
| Mercer | 477 | 10 | 267 | 9 | 22 | 3 |
| Middlesex | 772 | 11 | 357 | 10 | 15 | 3 |
| Morris | 821 | 11 | 166 | 11 | 19 | 2 |
| Ocean [3] | 371 | 12 | 141 | 10 | 46 | 8 |
| Passaic | 19 | 9 | 47 | 7 | 13 | 5 |
| Salem | 84 | 13 | 40 | 12 | 39 | 13 |
| Somerset | 215 | 12 | 75 | 11 | 2 | 12 |
| Sussex [4] | -- | -- | -- | -- | -- | -- |
| Union | 334 | 10 | 198 | 7 | 48 | 7 |
| Warren [1] | N/A | N/A | 2 | 8 | -- | -- |
| County College Total/Average | 5025 | 10 | 2240 | 9 | 576 | 7 |
| **STATE COLLEGES** | | | | | | |
| Glassboro | 512 | 13 | 235 | 12 | 34 | 10 |
| Jersey City | 184 | 12 | 93 | 11 | 53 | 12 |
| Kean | 470 | 12 | 173 | 11 | 16 | 10 |
| Montclair | 841 | 14 | 348 | 13 | 3 | 14 |
| Ramapo | 95 | 13 | 65 | 12 | 17 | 11 |
| Stockton [5] | 351 | 13 | 205 | 12 | 0 | -- |
| Trenton | 611 | N/A | 108 | N/A | 9 | N/A |
| Wm. Paterson | 614 | 11 | 167 | 10 | 37 | 10 |
| Thomas Edison [6] | 20 | -- | 2 | -- | 0 | -- |
| State College Total/Average | 3698 | 12 | 1396 | 12 | 169 | 11 |
| **NJIT** [1] | 336 | 14 | 20 | 14 | 6 | 10 |
| **RUTGERS UNIVERSITY** [7] | | | | | | |
| Camden | 186 | 13 | 54 [8] | 12 | 9[8] | 9[8] |
| Newark [1] | 396 | 13 | 70 | 9 | 9 | 6 |
| New Brunswick | 3440 | 14 | 223 | 12 | 179 | 13 |
| Rutgers University Total/Average | 4022 | 14 | 347 | 12 | 193 | 12 |

## TABLE 14

## MEAN CREDITS EARNED FOR FALL 1983 ENTERING STUDENTS ACCORDING TO NEED FOR REMEDIATION IN WRITING, BY COLLEGE SPRING 1985 TERM

| | NO REMEDIATION* | | COMPLETED REMEDIATION * | | DID NOT COMPLETE REMEDIATION * | |
|---|---|---|---|---|---|---|
| | (N) | Mean Credits Earned | (N) | Mean Credits Earned | (N) | Mean Credits Earned |
| COUNTY COLLEGES | | | | | | |
| Atlantic | 195 | 10 | 40 | 10 | 5 | N/A |
| Bergen | 407 | 13 | 104 | 9 | 25 | 5 |
| Brookdale | 407 | 9 | 106 | 7 | 11 | 2 |
| Burlington | 109 | 10 | 163 | 9 | 16 | 3 |
| Camden | 330 | 10 | 225 | 8 | 63 | 7 |
| Cumberland | 71 | 11 | 52 | 10 | 1 | -- |
| Essex | 30 | 9 | 93 | 8 | 61 | 7 |
| Gloucester | 201 | 13 | 88 | 10 | 9 | 2 |
| Hudson | 49 | 11 | 56 | 8 | 15 | 5 |
| Mercer | 474 | 10 | 279 | 9 | 15 | 3 |
| Middlesex | 829 | 11 | 290 | 10 | 25 | 3 |
| Morris | 814 | 11 | 168 | 11 | 24 | 3 |
| Ocean[1] | 472 | 12 | 77 | 8 | 9 | 7 |
| Passaic | 7 | 8 | 53 | 7 | 14 | 5 |
| Salem | 87 | 13 | 40 | 12 | 7 | 6 |
| Somerset | 232 | 12 | 65 | 11 | 0 | -- |
| Sussex[2] | -- | -- | -- | -- | -- | -- |
| Union | 357 | 10 | 187 | 8 | 43 | 7 |
| Warren[3] | -- | -- | -- | -- | -- | -- |
| County College Total/Average | 5071 | 11 | 2086 | 9 | 343 | 5 |
| STATE COLLEGES | | | | | | |
| Glassboro | 565 | 13 | 198 | 12 | 17 | 10 |
| Jersey City | 216 | 12 | 93 | 11 | 22 | 10 |
| Kean | 424 | 12 | 223 | 11 | 12 | 6 |
| Montclair | 1102 | 14 | 90 | 12 | 0 | -- |
| Ramapo | 71 | 12 | 97 | 13 | 12 | 9 |
| Stockton | 301 | 13 | 255 | 12 | 0 | -- |
| Trenton | 622 | N/A | 190 | N/A | 16 | N/A |
| Wm. Paterson | 471 | 11 | 309 | 11 | 38 | 9 |
| Thomas Edison[4] | 21 | -- | 1 | -- | 0 | -- |
| State College Total/Average | 3793 | 13 | 1455 | 11 | 117 | 9 |
| NJIT | 319 | 14 | 43 | 13 | 0 | -- |
| RUTGERS UNIVERSITY[5] | | | | | | |
| Camden | 200 | 13 | 40[6] | 13 | 5[6] | 9[6] |
| Newark[3] | -- | -- | -- | -- | -- | -- |
| New Brunswick | 3348 | 14 | 470 | 13 | 24 | 12 |
| Rutgers University Total/Average | 3548 | 14 | 510 | 13 | 29 | 12 |

## TABLE 15

## MEAN CREDITS EARNED FOR FALL 1983 ENTERING STUDENTS ACCORDING TO NEED FOR REMEDIATION IN COMPUTATION, BY COLLEGE SPRING 1985 TERM

| | NO REMEDIATION* | | COMPLETED REMEDIATION* | | DID NOT COMPLETE REMEDIATION* | |
|---|---|---|---|---|---|---|
| | (N) | Mean Credits Earned | (N) | Mean Credits Earned | (N) | Mean Credits Earned |
| **COUNTY COLLEGES** | | | | | | |
| Atlantic | 116 | 11 | 70 | 9 | 66 | N/A |
| Bergen | 353 | 9 | 436 | 9 | 64 | 6 |
| Brookdale | 293 | 9 | 159 | 8 | 55 | 5 |
| Burlington | 134 | 10 | 102 | 8 | 52 | 9 |
| Camden | 400 | 9 | 153 | 8 | 51 | 7 |
| Cumberland | 87 | 10 | 30 | 10 | 9 | 10 |
| Essex | 34 | 10 | 75 | 8 | 98 | 8 |
| Gloucester | 169 | 12 | 118 | 11 | 11 | 5 |
| Hudson | 44 | 11 | 37 | 8 | 39 | 8 |
| Mercer | 507 | 10 | 241 | 8 | 17 | 4 |
| Middlesex | 654 | 11 | 453 | 10 | 37 | 4 |
| Morris | 884 | 11 | 91 | 12 | 31 | 8 |
| Ocean[1] | 384 | 12 | 131 | 9 | 43 | 9 |
| Passaic | 3 | 10 | 58 | 7 | 12 | 8 |
| Salem | 92 | 14 | 35 | 10 | 7 | 5 |
| Somerset[2] | -- | -- | -- | -- | -- | -- |
| Sussex[3] | -- | -- | -- | -- | -- | -- |
| Union | 309 | 10 | 165 | 8 | 101 | 8 |
| Warren | N/A | N/A | 1 | 11 | 0 | -- |
| County College Total/Average | 4463 | 10 | 2355 | 9 | 693 | 7 |
| **STATE COLLEGES** | | | | | | |
| Glassboro | 548 | 13 | 203 | 12 | 30 | 11 |
| Jersey City | 170 | 12 | 104 | 12 | 52 | 10 |
| Kean[4] | -- | -- | -- | -- | -- | -- |
| Montclair | 1024 | 14 | 166 | 13 | 2 | 10 |
| Ramapo | 150 | 13 | 23 | 10 | 2 | 10 |
| Stockton[5] | 365 | 13 | 191 | 12 | 0 | -- |
| Trenton | 535 | N/A | 163 | N/A | 30 | N/A |
| Wm. Paterson | 593 | 11 | 178 | 10 | 47 | 10 |
| Thomas Edison[6] | 20 | -- | 2 | -- | 0 | -- |
| State College Total/Average | 3405 | 13 | 1030 | 12 | 163 | 10 |
| NJIT[4] | -- | -- | -- | -- | -- | -- |
| **RUTGERS UNIVERSITY[4]** | | | | | | |
| Camden | -- | -- | -- | -- | -- | -- |
| Newark | -- | -- | -- | -- | -- | -- |
| New Brunswick | -- | -- | -- | -- | -- | -- |
| Rutgers University Total/Average | -- | -- | -- | -- | -- | -- |

## TABLE 16

## MEAN CREDITS EARNED FOR FALL 1983 ENTERING STUDENTS ACCORDING TO NEED FOR REMEDIATION IN ELEMENTARY ALGEBRA, BY COLLEGE SPRING 1985 TERM

| | NO REMEDIATION* | | COMPLETED REMEDIATION * | | DID NOT COMPLETE REMEDIATION* | |
|---|---|---|---|---|---|---|
| | (N) | Mean Credits Earned | (N) | Mean Credits Earned | (N) | Mean Credits Earned |
| COUNTY COLLEGES | | | | | | |
| Atlantic [1] | -- | -- | -- | -- | -- | -- |
| Bergen | 86 | 9 | 378 | 9 | 389 | 7 |
| Brookdale | 164 | 10 | 174 | 9 | 170 | 7 |
| Burlington | 89 | 9 | 68 | 9 | 89 | 8 |
| Camden | 210 | 10 | 237 | 9 | 152 | 7 |
| Cumberland | 59 | 10 | 26 | 10 | 7 | 10 |
| Essex | 22 | 12 | 78 | 9 | 96 | 7 |
| Gloucester [2] | N/A | N/A | N/A | N/A | N/A | N/A |
| Hudson | 15 | 10 | 17 | 9 | 35 | 8 |
| Mercer | 395 | 10 | 296 | 10 | 74 | 4 |
| Middlesex | 257 | 11 | 83 | 8 | 20 | 6 |
| Morris | 895 | 11 | 49 | 13 | 62 | 9 |
| Ocean [3] | 151 | 12 | 0 | -- | 2 | 9 |
| Passaic | 0 | -- | 2 | 11 | 3 | 6 |
| Salem [4] | 70 | 11 | 32 | 12 | 3 | 8 |
| Somerset | 180 | 12 | 99 | 12 | 12 | 7 |
| Sussex [5] | -- | -- | -- | -- | -- | -- |
| Union | 213 | 11 | 69 | 9 | 24 | 6 |
| Warren | N/A | N/A | -- | -- | -- | -- |
| County College Total/Average | 2806 | 11 | 1608 | 9 | 1138 | 7 |
| STATE COLLEGES | | | | | | |
| Glassboro | 321 | 13 | 404 | 13 | 56 | 9 |
| Jersey City | 78 | 13 | 82 | 12 | 10 | 10 |
| Kean | 462 | 12 | 183 | 11 | 14 | 9 |
| Montclair | 461 | 14 | 522 | 13 | 12 | 9 |
| Ramapo | 39 | 12 | 94 | 13 | 23 | 11 |
| Stockton [1] | -- | -- | -- | -- | -- | -- |
| Trenton | 443 | N/A | 241 | N/A | 44 | N/A |
| Wm. Paterson | 720 | 11 | 69 | 11 | 29 | 8 |
| Thomas Edison [6] | 7 | -- | 7 | -- | 8 | -- |
| State College Total/Average | 2531 | 12 | 1602 | 12 | 196 | 9 |
| NJIT [7] | 252 | 14 | 106 | 13 | 4 | 12 |
| RUTGERS UNIVERSITY | | | | | | |
| Camden | 208 | 13 | 20 | 12 | 17 | 12 |
| Newark | 385 | 12 | 83 | 11 | 7 | 10 |
| New Brunswick | 3319 | 14 | 203 | 13 | 312 | 13 |
| Rutgers University Total/Average | 3912 | 14 | 306 | 12 | 336 | 13 |

## TABLE 17

## GRADE POINT AVERAGE (GPA) FOR FALL 1983 ENTERING STUDENTS ACCORDING TO NEED FOR REMEDIATION IN READING, BY COLLEGE CUMULATIVE THROUGH SPRING 1985

| | NO REMEDIATION* | | | COMPLETED REMEDIATION* | | | DID NOT COMPLETE REMEDIATION* | | |
|---|---|---|---|---|---|---|---|---|---|
| | (N) | Mean | %≥2.00 | (N) | Mean | %≥2.00 | (N) | Mean | %≥2.00 |
| COUNTY COLLEGES | | | | | | | | | |
| Atlantic | 132 | 2.79 | 91 | 72 | 2.27 | 70 | 30 | 2.16 | 65 |
| Bergen[1] | 547 | 2.52 | 82 | 287 | 2.10 | 63 | 19 | 1.18 | 16 |
| Brookdale[2] | 339 | -- | -- | 134 | -- | -- | 40 | -- | -- |
| Burlington | 114 | 2.49 | 99 | 104 | 2.21 | 64 | 70 | 2.04 | 50 |
| Camden | 388 | 2.69 | 94 | 160 | 2.28 | 74 | 67 | 2.26 | 75 |
| Cumberland | 80 | 2.98 | 91 | 37 | 2.25 | 70 | 7 | 2.53 | 86 |
| Essex | 34 | 2.78 | 91 | 39 | 2.10 | 56 | 133 | 2.23 | 69 |
| Gloucester | 250 | 2.48 | 80 | 42 | 1.72 | 33 | 6[3] | 1.15 | 0 |
| Hudson | 48 | 2.72 | 83 | 72 | 1.90 | 53 | -- | -- | -- |
| Mercer | 477 | 2.46 | 75 | 267 | 1.99 | 52 | 22 | 1.09 | 27 |
| Middlesex | 772 | 2.55 | 82 | 357 | 2.22 | 69 | 15 | 1.32 | 33 |
| Morris | 821 | 2.40 | 76 | 166 | 2.00 | 55 | 19 | 1.40 | 21 |
| Ocean[4] | 371 | 2.72 | 88 | 141 | 2.25 | 67 | 46 | 1.95 | 57 |
| Passaic | 19 | 2.68 | 74 | 47 | 1.86 | 38 | 13 | 1.60 | 23 |
| Salem | 84 | 2.78 | 85 | 40 | 2.22 | 63 | 39 | 2.27 | 64 |
| Somerset | 215 | 2.65 | 87 | 75 | 2.21 | 68 | 2 | 2.33 | 50 |
| Sussex[5] | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Union | 334 | 2.40 | 75 | 198 | 1.96 | 50 | 48 | 1.90 | 56 |
| Warren[1] | N/A | N/A | N/A | 2 | 1.79 | 50 | -- | -- | -- |
| County College Total/ Average | 5025 | 2.55 | 82 | 2240 | 2.11 | 61 | 576 | 1.99 | 56 |
| STATE COLLEGES | | | | | | | | | |
| Glassboro | 512 | 2.68 | 86 | 235 | 2.35 | 75 | 34 | 2.12 | 56 |
| Jersey City | 184 | 2.60 | 80 | 93 | 2.30 | 76 | 53 | 2.20 | 63 |
| Kean | 470 | 2.64 | 82 | 173 | 2.43 | 76 | 16 | 2.05 | 63 |
| Montclair | 841 | 2.90 | 99 | 348 | 2.50 | 83 | 3 | 2.50 | 100 |
| Ramapo | 95 | 2.76 | 89 | 65 | 2.27 | 74 | 17 | 2.44 | 80 |
| Stockton[6] | 351 | 2.67 | 84 | 205 | 2.33 | 69 | 0 | -- | -- |
| Trenton | 611 | 2.76 | 93 | 108 | 2.36 | 71 | 9 | 1.98 | 56 |
| Wm. Paterson | 614 | 2.40 | 73 | 167 | 2.00 | 47 | 37 | 2.07 | 57 |
| Thomas Edison[7] | 20 | -- | -- | 2 | -- | -- | 0 | -- | -- |
| State College Total/ Average | 3698 | 2.69 | 87 | 1396 | 2.35 | 73 | 169 | 2.16 | 62 |
| NJIT[1] | 336 | 2.60 | 85 | 20 | 2.38 | 75 | 6 | 2.17 | 50 |
| RUTGERS UNIVERSITY[8] | | | | | | | | | |
| Camden | 186 | 2.80 | 89 | 54[9] | 2.50 | 82[9] | 5[9] | 2.40[9] | 100 |
| Newark[1] | 396 | 2.60 | 84 | 70 | 2.10 | 50 | 9 | 1.80 | 38 |
| New Brunswick | 3440 | 2.70 | 86 | 223 | 2.10 | 60 | 179 | 2.20 | 58 |
| Rutgers University Total/ Average | 4022 | 2.69 | 86 | 347 | 2.16 | 61 | 193 | 2.19 | 58 |

## TABLE 18

### GRADE POINT AVERAGE (GPA) FOR FALL 1983 ENTERING STUDENTS ACCORDING TO NEED FOR REMEDIATION IN WRITING, BY COLLEGE CUMULATIVE THROUGH SPRING 1985

| | NO REMEDIATION* | | | COMPLETED REMEDIATION* | | | DID NOT COMPLETE REMEDIATION* | | |
|---|---|---|---|---|---|---|---|---|---|
| | (N) | Mean | % ≥ 2.00 | (N) | Mean | % ≥ 2.00 | (N) | Mean | % ≥ 2.00 |
| COUNTY COLLEGES | | | | | | | | | |
| Atlantic | 195 | 2.62 | 86 | 40 | 2.31 | 58 | 5 | 1.86 | 60 |
| Bergen | 407 | 2.58 | 85 | 104 | 2.43 | 78 | 25 | 1.87 | 52 |
| Brookdale[1] | 407 | -- | -- | 106 | -- | -- | 11 | -- | -- |
| Burlington | 109 | 2.54 | 77 | 163 | 2.17 | 61 | 16 | 1.55 | 25 |
| Camden | 330 | 2.72 | 96 | 225 | 2.33 | 78 | 63 | 2.33 | 73 |
| Cumberland | 71 | 2.91 | 93 | 52 | 2.35 | 75 | 1 | -- | -- |
| Essex | 30 | 2.80 | 93 | 93 | 2.23 | 68 | 61 | 2.04 | 59 |
| Gloucester | 201 | 2.62 | 87 | 88 | 1.86 | 43 | 9 | 0.92 | 0 |
| Hudson | 49 | 2.73 | 86 | 56 | 1.86 | 41 | 15 | 2.08 | 87 |
| Mercer | 474 | 2.46 | 74 | 279 | 1.96 | 52 | 15 | 1.18 | 27 |
| Middlesex | 829 | 2.54 | 82 | 290 | 2.22 | 70 | 25 | 1.39 | 24 |
| Morris | 814 | 2.40 | 76 | 168 | 1.90 | 55 | 24 | 1.50 | 17 |
| Ocean[2] | 472 | 2.63 | 85 | 77 | 2.06 | 55 | 9 | 1.82 | 44 |
| Passaic | 7 | 2.92 | 71 | 53 | 2.01 | 47 | 14 | 1.57 | 21 |
| Salem | 87 | 2.79 | 85 | 40 | 2.38 | 72 | 7 | 1.69 | 29 |
| Somerset | 232 | 2.62 | 80 | 65 | 2.22 | 66 | 0 | -- | |
| Sussex[3] | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Union | 357 | 2.40 | 76 | 187 | 1.93 | 49 | 43 | 1.85 | 49 |
| Warren[4] | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| County College Total/ Average | 5071 | 2.55 | 82 | 2086 | 2.12 | 61 | 343 | 1.84 | 48 |
| STATE COLLEGES | | | | | | | | | |
| Glassboro | 565 | 2.66 | 86 | 198 | 2.29 | 68 | 17 | 2.30 | 71 |
| Jersey City | 216 | 3.00 | 85 | 93 | 2.20 | 66 | 22 | 2.20 | 46 |
| Kean | 424 | 2.70 | 86 | 223 | 2.38 | 72 | 12 | 1.73 | 50 |
| Montclair | 1102 | 2.90 | 94 | 90 | 2.20 | 71 | 0 | -- | |
| Ramapo | 71 | 2.75 | 92 | 97 | 2.49 | 81 | 12 | 2.13 | 71 |
| Stockton | 301 | 2.61 | 81 | 255 | 2.46 | 75 | 0 | -- | |
| Trenton | 622 | 2.77 | 92 | 190 | 2.47 | 82 | 16 | 2.35 | 88 |
| Wm. Paterson | 471 | 2.43 | 75 | 309 | 2.13 | 56 | 38 | 2.12 | 53 |
| Thomas Edison[5] | 21 | -- | -- | 1 | -- | -- | 0 | -- | -- |
| State College Total/ Average | 3793 | 2.74 | 88 | 1456 | 2.33 | 70 | 117 | 2.15 | 61 |
| NJIT | 319 | 2.58 | 85 | 43 | 2.57 | 79 | 0 | -- | -- |
| RUTGERS UNIVERSITY[6] | | | | | | | | | |
| Camden | 200 | 2.70 | 88 | 40[7] | 2.50 | 85[7] | 5[7] | 2.40[7] | 100 |
| Newark[4] | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| New Brunswick | 3348 | 2.70 | 86 | 470 | 2.20 | 65 | 24 | 1.90 | 38 |
| Rutgers University Total/ Average | 3548 | 2.70 | 86 | 510 | 2.22 | 66 | 29 | 1.99 | 48 |

# TABLE 19

## GRADE POINT AVERAGE (GPA) FOR FALL 1983 ENTERING STUDENTS ACCORDING TO NEED FOR REMEDIATION IN COMPUTATION, BY COLLEGE CUMULATIVE THROUGH SPRING 1985

| | NO REMEDIATION * | | | COMPLETED REMEDIATION * | | | DID NOT COMPLETE REMEDIATION * | | |
|---|---|---|---|---|---|---|---|---|---|
| | (N) | Mean | % ≥ 2.00 | (N) | Mean | % ≥ 2.00 | (N) | Mean | % ≥ 2.00 |
| **COUNTY COLLEGES** | | | | | | | | | |
| Atlantic | 116 | 2.70 | 86 | 70 | 2.35 | 71 | 66 | 2.26 | 65 |
| Bergen | 353 | 2.56 | 82 | 436 | 2.27 | 73 | 64 | 1.67 | 44 |
| Brookdale [1] | 293 | -- | -- | 159 | -- | -- | 55 | -- | -- |
| Burlington | 134 | 2.44 | 73 | 102 | 2.10 | 56 | 52 | 2.22 | 62 |
| Camden | 400 | 2.64 | 91 | 153 | 2.35 | 80 | 51 | 2.12 | 63 |
| Cumberland | 87 | 2.74 | 91 | 30 | 2.56 | 77 | 9 | 2.21 | 56 |
| Essex | 34 | 2.72 | 79 | 75 | 2.19 | 67 | 98 | 2.23 | 69 |
| Gloucester | 169 | 2.54 | 82 | 118 | 2.14 | 59 | 11 | 1.57 | 27 |
| Hudson | 44 | 2.69 | 82 | 37 | 2.06 | 54 | 39 | 1.87 | 56 |
| Mercer | 507 | 2.39 | 71 | 241 | 2.04 | 54 | 17 | 1.53 | 35 |
| Middlesex | 654 | 2.55 | 82 | 453 | 2.33 | 75 | 37 | 1.54 | 35 |
| Morris | 884 | 2.40 | 74 | 91 | 2.10 | 64 | 31 | 1.70 | 23 |
| Ocean [2] | 384 | 2.68 | 85 | 131 | 2.23 | 69 | 43 | 2.20 | 67 |
| Passaic | 3 | 2.36 | 67 | 58 | 1.99 | 40 | 12 | 1.83 | 46 |
| Salem | 92 | 2.75 | 84 | 35 | 2.31 | 69 | 7 | 2.32 | 57 |
| Somerset [3] | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Sussex [4] | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Union | 309 | 2.38 | 73 | 165 | 2.08 | 58 | 101 | 1.88 | 52 |
| Warren | N/A | N/A | N/A | 1 | 2.05 | 100 | 0 | -- | -- |
| County College Total/ Average | 4463 | 2.52 | 79 | 2355 | 2.22 | 67 | 693 | 1.99 | 55 |
| **STATE COLLEGES** | | | | | | | | | |
| Glassboro | 548 | 2.62 | 84 | 203 | 2.43 | 77 | 30 | 2.26 | 63 |
| Jersey City | 170 | 2.60 | 80 | 104 | 2.30 | 73 | 52 | 2.20 | 71 |
| Kean [5] | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Montclair | 1024 | 2.90 | 94 | 166 | 2.50 | 86 | 2 | 2.00 | 50 |
| Ramapo | 150 | 2.60 | 85 | 23 | 2.32 | 65 | 2 | 1.89 | 50 |
| Stockton [6] | 365 | 2.65 | 83 | 191 | 2.33 | 70 | 0 | -- | |
| Trenton | 535 | 2.78 | 93 | 163 | 2.47 | 80 | 30 | 2.13 | 67 |
| Wm. Paterson | 593 | 2.38 | 71 | 178 | 2.14 | 56 | 47 | 2.04 | 51 |
| Thomas Edison [7] | 20 | -- | -- | 2 | -- | -- | 0 | -- | -- |
| State College Total/ Average | 3405 | 2.69 | 86 | 1030 | 2.36 | 73 | 163 | 2.15 | 63 |
| **NJIT** [5] | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| **RUTGERS UNIVERSITY** [5] | | | | | | | | | |
| Camden | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Newark | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| New Brunswick | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Rutgers University Total/ Average | -- | -- | -- | -- | -- | -- | -- | -- | -- |

## TABLE 20

### GRADE POINT AVERAGE (GPA) FOR FALL 1983 ENTERING STUDENTS ACCORDING TO NEED FOR REMEDIATION IN ELEMENTARY ALGEBRA, BY COLLEGE CUMULATIVE THROUGH SPRING 1985

| | NO REMEDIATION * | | | COMPLETED REMEDIATION * | | | DID NOT COMPLETE REMEDIATION * | | |
|---|---|---|---|---|---|---|---|---|---|
| | (N) | Mean | %≥2.00 | (N) | Mean | %≥2.00 | (N) | Mean | %≥2.00 |
| **COUNTY COLLEGES** | | | | | | | | | |
| Atlantic [1] | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Bergen | 86 | 2.57 | 78 | 378 | 2.47 | 80 | 389 | 2.18 | 68 |
| Brookdale [2] | 164 | -- | -- | 174 | -- | -- | 170 | -- | -- |
| Burlington | 89 | 2.46 | 74 | 68 | 2.16 | 57 | 89 | 2.15 | 61 |
| Camden | 210 | 2.74 | 95 | 237 | 2.48 | 85 | 152 | 2.29 | 74 |
| Cumberland | 59 | 2.64 | 91 | 26 | 2.52 | 85 | 7 | 2.93 | 100 |
| Essex | 22 | 2.87 | 86 | 78 | 2.33 | 73 | 96 | 2.13 | 64 |
| Gloucester [3] | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Hudson | 15 | 2.77 | 93 | 17 | 2.19 | 59 | 35 | 2.09 | 63 |
| Mercer | 395 | 2.39 | 73 | 296 | 2.26 | 63 | 74 | 1.41 | 27 |
| Middlesex | 257 | 2.50 | 77 | 83 | 2.23 | 66 | 20 | 1.90 | 60 |
| Morris | 895 | 2.40 | 73 | 49 | 2.30 | 69 | 62 | 2.00 | 55 |
| Ocean [4] | 151 | 2.73 | 87 | 0 | -- | -- | 2 | 1.70 | 50 |
| Passaic | 0 | -- | -- | 2 | 3.27 | 100 | 3 | 2.11 | 67 |
| Salem [5] | 70 | 2.59 | 73 | 32 | 2.64 | 91 | 3 | 2.30 | 67 |
| Somerset | 180 | 2.56 | 82 | 99 | 2.45 | 80 | 12 | 2.09 | 83 |
| Sussex [6] | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Union | 213 | 2.51 | 78 | 59 | 2.15 | 61 | 24 | 1.79 | 58 |
| Warren | N/A | N/A | N/A | -- | -- | -- | -- | -- | -- |
| County College Total/ Average | 2806 | 2.50 | 78 | 1608 | 2.37 | 74 | 1138 | 2.10 | 64 |
| **STATE COLLEGES** | | | | | | | | | |
| Glassboro | 321 | 2.68 | 85 | 404 | 2.53 | 82 | 56 | 2.03 | 48 |
| Jersey City | 78 | 2.80 | 86 | 82 | 2.70 | 87 | 10 | 2.40 | 65 |
| Kean | 462 | 2.66 | 84 | 183 | 2.41 | 73 | 14 | 2.03 | 57 |
| Montclair | 461 | 3.00 | 97 | 522 | 2.70 | 89 | 12 | 2.10 | 58 |
| Ramapo | 39 | 2.51 | 79 | 94 | 2.54 | 92 | 23 | 2.38 | 85 |
| Stockton [1] | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Trenton | 443 | 2.84 | 95 | 241 | 2.49 | 83 | 44 | 2.26 | 68 |
| Wm. Paterson | 720 | 2.53 | 69 | 69 | 2.17 | 57 | 29 | 2.02 | 45 |
| Thomas Edison [7] | 7 | -- | -- | 7 | -- | -- | 8 | -- | -- |
| State College Total/ Average | 2531 | 2.66 | 84 | 1602 | 2.56 | 83 | 196 | 2.15 | 59 |
| NJIT [8] | 252 | 2.66 | 76 | 106 | 2.40 | 76 | 4 | 2.57 | 75 |
| **RUTGERS UNIVERSITY** | | | | | | | | | |
| Camden | 208 | 2.70 | 87 | 20 | 2.60 | 90 | 17 | 2.60 | 88 |
| Newark | 385 | 2.60 | 80 | 83 | 2.40 | 74 | 7 | 2.30 | 57 |
| New Brunswick | 3319 | 2.70 | 85 | 203 | 2.30 | 74 | 312 | 2.40 | 72 |
| Rutgers University Total/ Average | 3912 | 2.69 | 85 | 306 | 2.35 | 75 | 336 | 2.41 | 72 |

## TABLE 21

## GRADE POINT AVERAGE (GPA) FOR FALL 1983 ENTERING STUDENTS ACCORDING TO NEED FOR REMEDIATION IN READING, BY COLLEGE SPRING 1985 TERM

| | NO REMEDIATION* | | | COMPLETED REMEDIATION* | | | DID NOT COMPLETE REMEDIATION* | | |
|---|---|---|---|---|---|---|---|---|---|
| | (N) | Mean | %≥2.00 | (N) | Mean | %≥2.00 | (N) | Mean | %≥2.00 |
| COUNTY COLLEGES | | | | | | | | | |
| Atlantic | 132 | 2.61 | 82 | 72 | 2.09 | 60 | 30 | 1.79 | 66 |
| Bergen [1] | 547 | 2.25 | 69 | 287 | 1.89 | 60 | 19 | 1.25 | 26 |
| Brookdale [2] | 339 | -- | -- | 134 | -- | -- | 40 | -- | -- |
| Burlington | 114 | 2.38 | N/A | 104 | 2.01 | N/A | 70 | 1.91 | N/A |
| Camden | 388 | 2.64 | 87 | 160 | 2.17 | 73 | 67 | 2.08 | 64 |
| Cumberland | 80 | 2.73 | 84 | 37 | 2.11 | 62 | 7 | 2.40 | 86 |
| Essex | 34 | 2.51 | 79 | 39 | 1.90 | 51 | 133 | 1.96 | 63 |
| Gloucester | 250 | 2.49 | 74 | 42 | 1.57 | 33 | 6 | 1.11 | 17 |
| Hudson | 48 | 2.62 | 81 | 72 | 1.74 | 53 | --[3] | -- | -- |
| Mercer | 477 | 2.37 | 72 | 267 | 1.90 | 53 | 22 | 0.73 | 27 |
| Middlesex | 772 | 2.60 | 83 | 357 | 2.24 | 77 | 15 | 1.13 | 33 |
| Morris [4] | 821 | 2.70 | N/A | 166 | 2.10 | N/A | 19 | 1.30 | N/A |
| Ocean | 371 | 2.52 | 75 | 141 | 2.14 | 67 | 46 | 1.68 | 54 |
| Passaic | 19 | 2.55 | 68 | 47 | 1.65 | 47 | 13 | 1.30 | 23 |
| Salem | 84 | 2.72 | 76 | 40 | 2.16 | 63 | 39 | 2.22 | 64 |
| Somerset | 215 | 2.65 | 80 | 75 | 2.25 | 68 | 2 | 2.02 | 50 |
| Sussex [5] | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Union | 334 | 2.31 | 77 | 198 | 1.75 | 50 | 48 | 1.82 | 58 |
| Warren [1] | N/A | N/A | N/A | 2 | 2.26 | 50 | -- | -- | -- |
| County College Total/ Average | 5025 | 2.52 | 77 | 2240 | 2.01 | 62 | 576 | 1.80 | 56 |
| STATE COLLEGES | | | | | | | | | |
| Glassboro | 512 | 2.63 | 82 | 235 | 2.19 | 71 | 34 | 1.87 | 59 |
| Jersey City | 184 | 2.50 | 75 | 93 | 2.30 | 68 | 53 | 2.20 | 61 |
| Kean | 470 | 2.55 | 79 | 173 | 2.34 | 72 | 16 | 1.94 | 50 |
| Montclair | 841 | 2.90 | 90 | 348 | 2.40 | 76 | 3 | 2.70 | 100 |
| Ramapo | 95 | 2.66 | 86 | 65 | 2.17 | 69 | 17 | 2.47 | 79 |
| Stockton [6] | 351 | 2.68 | 81 | 205 | 2.35 | 73 | 0 | -- | -- |
| Trenton | 611 | N/A | N/A | 108 | N/A | N/A | 9 | N/A | N/A |
| Wm. Paterson | 614 | 2.41 | 75 | 167 | 1.99 | 53 | 37 | 2.10 | 54 |
| Thomas Edison [7] | 20 | -- | -- | 2 | -- | -- | 0 | -- | -- |
| State College Total/ Average | 3698 | 2.65 | 82 | 1396 | 2.27 | 70 | 169 | 2.12 | 60 |
| NJIT [1] | 336 | 2.61 | 83 | 20 | 2.26 | 63 | 6 | 1.98 | 67 |
| RUTGERS UNIVERSITY [8] | | | | | | | | | |
| Camden | 186 | 2.70 | 84 | 54[9] | 2.40 | 74[9] | 5[9] | 2.00[9] | 40[9] |
| Newark [1] | 396 | 2.60 | 80 | 70 | 1.70 | 44 | 9 | 1.40 | 33 |
| New Brunswick | 3440 | 2.70 | 84 | 223 | 2.10 | 65 | 179 | 2.20 | 65 |
| Rutgers University Total/ Average | 4022 | 2.69 | 83 | 347 | 2.07 | 62 | 193 | 2.16 | 63 |

## TABLE 22

## GRADE POINT AVERAGE (GPA) FOR FALL 1983 ENTERING STUDENTS ACCORDING TO NEED FOR REMEDIATION IN WRITING, BY COLLEGE SPRING 1985 TERM

| | NO REMEDIATION* | | | COMPLETED REMEDIATION* | | | DID NOT COMPLETE REMEDIATION* | | |
|---|---|---|---|---|---|---|---|---|---|
| | (N) | Mean | %≥2.00 | (N) | Mean | %≥2.00 | (N) | Mean | %≥2.00 |
| **COUNTY COLLEGES** | | | | | | | | | |
| Atlantic | 195 | 2.39 | 75 | 40 | 2.17 | 63 | 5 | 1.70 | 60 |
| Bergen | 407 | 2.32 | 71 | 104 | 2.13 | 64 | 25 | 1.51 | 8 |
| Brookdale[1] | 407 | -- | -- | 106 | -- | -- | 11 | -- | -- |
| Burlington | 109 | 2.45 | N/A | 163 | 2.00 | N/A | 16 | 1.24 | N/A |
| Camden | 330 | 2.70 | 88 | 225 | 2.23 | 74 | 63 | 1.98 | 65 |
| Cumberland | 71 | 2.66 | 88 | 52 | 2.11 | 63 | 1 | 0.00 | -- |
| Essex | 30 | 2.67 | 83 | 93 | 1.90 | 63 | 61 | 1.76 | 49 |
| Gloucester | 201 | 2.56 | 78 | 88 | 1.80 | 50 | 9 | 0.54 | 0 |
| Hudson | 49 | 2.56 | 80 | 56 | 1.73 | 45 | 15 | 2.19 | 87 |
| Mercer | 474 | 2.37 | 71 | 279 | 1.86 | 54 | 15 | 0.57 | 20 |
| Middlesex | 829 | 2.59 | 84 | 290 | 2.25 | 75 | 25 | 0.70 | 25 |
| Morris | 814 | 2.60 | N/A | 168 | 2.00 | N/A | 24 | 1.90 | N/A |
| Ocean[2] | 472 | 2.46 | 78 | 77 | 1.77 | 56 | 9 | 2.02 | 67 |
| Passaic | 7 | 2.77 | 71 | 53 | 1.82 | 53 | 14 | 1.36 | 29 |
| Salem | 87 | 2.75 | 78 | 40 | 2.22 | 63 | 7 | 1.36 | 43 |
| Somerset | 232 | 2.62 | 86 | 65 | 2.25 | 68 | 0 | -- | -- |
| Sussex[3] | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Union | 357 | 2.30 | 77 | 187 | 1.79 | 49 | 43 | 1.53 | 49 |
| Warren[4] | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| County College Total/ Average | 5071 | 2.51 | 79 | 2086 | 2.01 | 62 | 343 | 1.57 | 49 |
| **STATE COLLEGES** | | | | | | | | | |
| Glassboro | 565 | 2.60 | 82 | 198 | 2.11 | 66 | 17 | 1.81 | 53 |
| Jersey City | 216 | 2.50 | 76 | 93 | 2.20 | 58 | 22 | 1.90 | 58 |
| Kean | 424 | 2.63 | 81 | 223 | 2.27 | 70 | 12 | 1.13 | 17 |
| Montclair | 1102 | 2.80 | 87 | 90 | 2.10 | 63 | 0 | -- | -- |
| Ramapo | 71 | 2.54 | 84 | 97 | 2.38 | 76 | 12 | 2.51 | 91 |
| Stockton | 301 | 2.68 | 83 | 255 | 2.42 | 72 | 0 | -- | -- |
| Trenton | 622 | N/A | N/A | 190 | N/A | N/A | 16 | N/A | N/A |
| Wm. Paterson | 471 | 2.46 | 79 | 303 | 2.10 | 58 | 38 | 2.03 | 51 |
| Thomas Edison[5] | 21 | -- | -- | 1 | -- | -- | 0 | -- | -- |
| State College Total/ Average | 3793 | 2.65 | 83 | 1456 | 2.22 | 66 | 117 | 1.91 | 54 |
| **NJIT** | 319 | 2.59 | 82 | 43 | 2.49 | 74 | 0 | -- | -- |
| **RUTGERS UNIVERSITY[6]** | | | | | | | | | |
| Camden | 200 | 2.60 | 83 | 40[7] | 2.50 | 78[7] | 5[7] | 2.00[7] | 40[7] |
| Newark[4] | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| New Brunswick | 3348 | 2.70 | 84 | 470 | 2.20 | 67 | 24 | 2.10 | 63 |
| Rutgers University Total/ Average | 3548 | 2.69 | 84 | 510 | 2.22 | 68 | 29 | 2.08 | 59 |

## TABLE 23

## GRADE POINT AVERAGE (GPA) FOR FALL 1983 ENTERING STUDENTS ACCORDING TO NEED FOR REMEDIATION IN COMPUTATION, BY COLLEGE SPRING 1985 TERM

| | NO REMEDIATION* | | | COMPLETED REMEDIATION* | | | DID NOT COMPLETE REMEDIATION* | | |
|---|---|---|---|---|---|---|---|---|---|
| | (N) | Mean | %≥2.00 | (N) | Mean | %≥2.00 | (N) | Mean | %≥2.00 |
| **COUNTY COLLEGES** | | | | | | | | | |
| Atlantic | 116 | 2.48 | 78 | 70 | 2.07 | 63 | 66 | 2.16 | 60 |
| Bergen | 353 | 2.27 | 67 | 436 | 2.09 | 67 | 64 | 1.38 | 42 |
| Brookdale[1] | 293 | -- | -- | 159 | -- | -- | 55 | -- | -- |
| Burlington | 134 | 2.23 | N/A | 102 | 2.01 | N/A | 52 | 2.12 | N/A |
| Camden | 400 | 2.59 | 84 | 153 | 2.18 | 74 | 51 | 1.89 | 63 |
| Cumberland | 87 | 2.43 | 82 | 30 | 2.52 | 73 | 9 | 1.59 | 44 |
| Essex | 34 | 2.34 | 77 | 75 | 1.88 | 55 | 98 | 2.04 | 65 |
| Gloucester | 169 | 2.58 | 75 | 118 | 2.05 | 59 | 11 | 1.63 | 36 |
| Hudson | 44 | 2.57 | 77 | 37 | 1.96 | 57 | 39 | 1.67 | 56 |
| Mercer | 507 | 2.32 | 70 | 241 | 1.83 | 51 | 17 | 1.57 | 53 |
| Middlesex | 654 | 2.58 | 83 | 453 | 2.39 | 79 | 37 | 1.39 | 53 |
| Morris | 884 | 2.70 | N/A | 91 | 2.30 | N/A | 31 | 2.00 | N/A |
| Ocean[2] | 384 | 2.55 | 76 | 131 | 1.90 | 58 | 43 | 2.02 | 70 |
| Passaic | 3 | 2.46 | 100 | 58 | 1.80 | 43 | 12 | 1.86 | 54 |
| Salem | 92 | 2.69 | 79 | 35 | 2.14 | 54 | 7 | 2.25 | 57 |
| Somerset[3] | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Sussex[4] | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Union | 309 | 2.29 | 74 | 165 | 1.90 | 52 | 101 | 1.80 | 54 |
| Warren | N/A | N/A | N/A | 1 | 3.27 | 100 | 0 | -- | -- |
| County College Total/ Average | 4463 | 2.51 | 77 | 2355 | 2.10 | 64 | 693 | 1.85 | 57 |
| **STATE COLLEGES** | | | | | | | | | |
| Glassboro | 548 | 2.54 | 79 | 203 | 2.31 | 75 | 30 | 1.98 | 57 |
| Jersey City | 170 | 2.60 | 74 | 104 | 2.30 | 73 | 52 | 1.70 | 52 |
| Kean[5] | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Montclair | 1024 | 2.80 | 87 | 166 | 2.40 | 78 | 2 | 1.90 | 50 |
| Ramapo | 150 | 2.49 | 82 | 23 | 2.16 | 61 | 2 | 1.88 | 97 |
| Stockton[6] | 365 | 2.68 | 81 | 191 | 2.33 | 72 | 0 | -- | -- |
| Trenton | 535 | N/A | N/A | 163 | N/A | N/A | 30 | N/A | N/A |
| Wm. Paterson | 593 | 2.38 | 73 | 178 | 2.13 | 62 | 47 | 2.02 | 56 |
| Thomas Edison[7] | 20 | -- | -- | 2 | -- | -- | 0 | -- | -- |
| State College[7] Total/ Average | 3405 | 2.62 | 81 | 1030 | 2.29 | 72 | 163 | 1.88 | 55 |
| **NJIT**[5] | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| **RUTGERS UNIVERSITY**[5] | | | | | | | | | |
| Camden | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Newark | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| New Brunswick | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Rutgers University Total/ Average | -- | -- | -- | -- | -- | -- | -- | -- | -- |

## TABLE 24

## GRADE POINT AVERAGE (GPA) FOR FALL 1983 ENTERING STUDENTS ACCORDING TO NEED FOR REMEDIATION IN ELEMENTARY ALGEBRA, BY COLLEGE
SPRING 1985 TERM

| | NO REMEDIATION* | | | COMPLETED REMEDIATION* | | | DID NOT COMPLETE REMEDIATION* | | |
|---|---|---|---|---|---|---|---|---|---|
| | (N) | Mean | %≥2.00 | (N) | Mean | %≥2.00 | (N) | Mean | %≥2.00 |
| COUNTY COLLEGES | | | | | | | | | |
| Atlantic[1] | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Bergen | 86 | 2.22 | 65 | 378 | 2.20 | 67 | 389 | 2.00 | 63 |
| Brookdale[2] | 164 | -- | -- | 174 | -- | -- | 170 | -- | -- |
| Burlington | 89 | 2.24 | 89 | 68 | 2.07 | 87 | 89 | 2.00 | 85 |
| Camden | 210 | 2.70 | 88 | 237 | 2.41 | 82 | 152 | 2.06 | 65 |
| Cumberland | 59 | 2.25 | 81 | 26 | 2.29 | 73 | 7 | 2.85 | 100 |
| Essex | 22 | 2.53 | 82 | 78 | 2.06 | 64 | 96 | 1.88 | 58 |
| Gloucester[3] | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Hudson | 15 | 2.79 | 80 | 17 | 2.14 | 71 | 35 | 1.85 | 57 |
| Mercer | 395 | 2.31 | 71 | 296 | 2.12 | 61 | 74 | 1.31 | 35 |
| Middlesex | 257 | 2.60 | 86 | 83 | 1.94 | 66 | 20 | 1.52 | 44 |
| Morris | 895 | 2.70 | N/A | 49 | 2.40 | N/A | 62 | 2.30 | N/A |
| Ocean[4] | 151 | 2.53 | 80 | 0 | -- | -- | 2 | 1.60 | 50 |
| Passaic | 0 | -- | -- | 2 | 3.17 | 100 | 3 | 1.47 | 33 |
| Salem[5] | 70 | 2.43 | 81 | 32 | 2.60 | 75 | 3 | 2.46 | 67 |
| Somerset | 180 | 2.61 | 80 | 99 | 2.38 | 72 | 12 | 2.23 | 75 |
| Sussex[6] | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Union | 213 | 2.46 | 77 | 69 | 2.08 | 62 | 24 | 1.37 | 50 |
| Warren | N/A | N/A | N/A | -- | -- | -- | -- | -- | -- |
| County College Total/ Average | 2806 | 2.55 | 79 | 1608 | 2.21 | 70 | 1138 | 1.94 | 62 |
| STATE COLLEGES | | | | | | | | | |
| Glassboro | 321 | 2.62 | 83 | 404 | 2.43 | 77 | 56 | 1.79 | 55 |
| Jersey City | 78 | 2.80 | 81 | 82 | 2.60 | 78 | 10 | 2.40 | 65 |
| Kean | 462 | 2.60 | 79 | 183 | 2.25 | 68 | 14 | 1.72 | 64 |
| Montclair | 461 | 2.90 | 92 | 522 | 2.60 | 80 | 12 | 1.70 | 42 |
| Ramapo | 39 | 2.54 | 82 | 94 | 2.63 | 85 | 73 | 2.09 | 65 |
| Stockton[1] | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Trenton | 443 | N/A | N/A | 241 | N/A | N/A | 44 | N/A | N/A |
| Wm. Paterson | 720 | 2.33 | 71 | 69 | 2.16 | 61 | 29 | 2.01 | 55 |
| Thomas Edison[7] | 7 | -- | -- | 7 | -- | -- | 8 | -- | -- |
| State College Total/ Average | 2531 | 2.58 | 80 | 1602 | 2.48 | 77 | 196 | 1.91 | 57 |
| NJIT[8] | 252 | 2.64 | 84 | 106 | 2.46 | 75 | 4 | 2.25 | 75 |
| RUTGERS UNIVERSITY | | | | | | | | | |
| Camden | 208 | 2.60 | 82 | 20 | 2.50 | 80 | 17 | 2.40 | 71 |
| Newark | 385 | 2.50 | 74 | 83 | 2.30 | 72 | 7 | 2.20 | 71 |
| New Brunswick | 3319 | 2.70 | 84 | 203 | 2.30 | 68 | 312 | 2.40 | 71 |
| Rutgers University Total/ Average | 3912 | 2.68 | 83 | 306 | 2.31 | 70 | 336 | 2.40 | 71 |

## TABLE 25

## SUCCESSFUL SURVIVAL RATES FOR FALL 1983 ENTERING STUDENTS ACCORDING TO NEED FOR REMEDIATION IN READING, BY COLLEGE CUMULATIVE THROUGH SPRING 1985

| | NO REMEDIATION* | | COMPLETED REMEDIATION* | | DID NOT COMPLETE REMEDIATION* | |
|---|---|---|---|---|---|---|
| | (N) | SSR** | (N) | SSR** | (N) | SSR** |
| COUNTY COLLEGES | | | | | | |
| Atlantic | 253 | 47 | 135 | 37 | 103 | 19 |
| Bergen [1] | 1169 | 39 | 564 | 32 | 187 | 2 |
| Brookdale | 693 | 49 | 277 | 48 | 155 | 26 |
| Burlington | 262 | 43 | 191 | 35 | 193 | 18 |
| Camden | 927 | 39 | 293 | 40 | 367 | 14 |
| Cumberland | 165 | 44 | 83 | 31 | 40 | 15 |
| Essex | 146 | 21 | 82 | 24 | 478 | 19 |
| Gloucester | 503 | 40 | 74 | 19 | 34 | 0 |
| Hudson | 134 | 30 | 117 | 25 | 194 | -- [2] |
| Mercer | 895 | 40 | 496 | 28 | 188 | 3 |
| Middlesex | 1461 | 43 | 614 | 40 | 201 | 3 |
| Morris | 1275 | 49 | 259 | 35 | 146 | 3 |
| Ocean [3] | 620 | 53 | 221 | 43 | 173 | 15 |
| Passaic | 63 | 22 | 91 | 20 | 191 | 2 |
| Salem [4] | 175 | 46 | 62 | 41 | 56 | 44 |
| Somerset | 524 | 37 | 140 | 36 | 51 | 2 |
| Sussex [5] | -- | -- | -- | -- | -- | -- |
| Union | 620 | 40 | 321 | 31 | 260 | 10 |
| Warren [1] | 79 | N/A | 4 | 50 | 0 | -- |
| County College Total/ Average % | 9964 | 43 | 4024 | 35 | 3017 | 12 |
| STATE COLLEGES | | | | | | |
| Glassboro | 736 | 60 | 327 | 54 | 86 | 22 |
| Jersey City | 325 | 45 | 139 | 51 | 129 | 26 |
| Kean | 717 | 54 | 229 | 58 | 57 | 18 |
| Montclair | 1124 | 71 | 460 | 61 | 28 | 11 |
| Ramapo | 264 | 32 | 140 | 34 | 33 | 41 |
| Stockton [6] | 497 | 59 | 284 | 50 | 24 | 0 |
| Trenton | 794 | 71 | 155 | 50 | 27 | 19 |
| Wm. Paterson | 919 | 49 | 226 | 36 | 103 | 20 |
| Thomas Edison [7] | 46 | 44 | 3 | 66 | 2 | 0 |
| State College Total/ Average % | 5422 | 59 | 1963 | 52 | 489 | 21 |
| NJIT [1] | 533 | 54 | 35 | 43 | 14 | 21 |
| RUTGERS UNIVERSITY [8] | | | | | | |
| Camden | 247 | 67 | 85 [9] | 52 | 10 [9] | 50 [9] |
| Newark [1] | 502 | 67 | 82 | 43 | 27 | 11 |
| New Brunswick | 3931 | 75 | 268 | 50 | 245 | 42 |
| Rutgers University Total/ Average % | 4680 | 74 | 435 | 49 | 282 | 40 |

## TABLE 26

### SUCCESSFUL SURVIVAL RATES FOR FALL 1983 ENTERING STUDENTS ACCORDING TO NEED FOR REMEDIATION IN WRITING, BY COLLEGE CUMULATIVE THROUGH SPRING 1985

| | NO REMEDIATION* | | COMPLETED REMEDIATION* | | DID NOT COMPLETE REMEDIATION* | |
|---|---|---|---|---|---|---|
| | (N) | SSR** | (N) | SSR** | (N) | SSR** |
| COUNTY COLLEGES | | | | | | |
| Atlantic | 376 | 45 | 88 | 26 | 27 | 11 |
| Bergen | 833 | 42 | 175 | 46 | 140 | 9 |
| Brookdale | 821 | 50 | 241 | 44 | 87 | 13 |
| Burlington | 240 | 35 | 306 | 32 | 100 | 4 |
| Camden | 830 | 38 | 365 | 43 | 444 | 10 |
| Cumberland | 144 | 46 | 121 | 32 | 11 | -- |
| Essex | 194 | 14 | 206 | 31 | 306 | 12 |
| Gloucester | 392 | 44 | 154 | 25 | 65 | 0 |
| Hudson | 139 | 30 | 100 | 23 | 206 | 2 |
| Mercer | 895 | 39 | 538 | 27 | 148 | 3 |
| Middlesex | 1574 | 43 | 483 | 42 | 219 | 3 |
| Morris | 1284 | 48 | 289 | 32 | 107 | 4 |
| Ocean[1] | 832 | 48 | 135 | 31 | 47 | 9 |
| Passaic | 32 | 15 | 126 | 20 | 182 | 2 |
| Salem | 172 | 47 | 58 | 48 | 55 | 4 |
| Somerset | 543 | 34 | 159 | 27 | 7 | 0 |
| Sussex[2] | -- | -- | -- | -- | -- | -- |
| Union | 676 | 40 | 309 | 29 | 215 | 10 |
| Warren[3] | -- | -- | -- | -- | -- | -- |
| County College Total/ Average % | 9977 | 42 | 3853 | 34 | 2368 | 7 |
| STATE COLLEGES | | | | | | |
| Glassboro | 827 | 59 | 260 | 52 | 62 | 19 |
| Jersey City | 382 | 48 | 134 | 46 | 77 | 13 |
| Kean | 656 | 55 | 284 | 56 | 63 | 10 |
| Montclair | 1456 | 70 | 142 | 42 | 14 | 0 |
| Ramapo | 206 | 32 | 157 | 50 | 74 | 12 |
| Stockton | 426 | 57 | 352 | 54 | 27 | 0 |
| Trenton | 689 | 70 | 252 | 62 | 35 | 40 |
| Wm. Paterson | 691 | 51 | 460 | 38 | 97 | 21 |
| Thomas Edison[4] | 43 | 49 | 3 | 33 | 5 | 0 |
| State College Total/ Average % | 5376 | 60 | 2044 | 50 | 454 | 16 |
| NJIT | 506 | 54 | 72 | 47 | 4 | 0 |
| RUTGERS UNIVERSITY[5] | | | | | | |
| Camden | 269 | 65 | 61[6] | 56 | 12[6] | 42[6] |
| Newark[3] | -- | -- | -- | -- | -- | -- |
| New Brunswick | 3830 | 75 | 544 | 55 | 70 | 13 |
| Rutgers University Total/ Average % | 4099 | 75 | 605 | 56 | 82 | 17 |

## TABLE 27

## SUCCESSFUL SURVIVAL RATES FOR FALL 1983 ENTERING STUDENTS ACCORDING TO NEED FOR REMEDIATION IN COMPUTATION, BY COLLEGE CUMULATIVE THROUGH SPRING 1985

| | NO REMEDIATION* | | COMPLETED REMEDIATION* | | DID NOT COMPLETE REMEDIATION* | |
|---|---|---|---|---|---|---|
| | (N) | SSR** | (N) | SSR** | (N) | SSR ** |
| **COUNTY COLLEGES** | | | | | | |
| Atlantic | 231 | 43 | 113 | 44 | 159 | 27 |
| Bergen | 690 | 42 | 821 | 39 | 409 | 7 |
| Brookdale | 572 | 51 | 253 | 63 | 284 | 19 |
| Burlington | 256 | 38 | 195 | 29 | 195 | 16 |
| Camden | 874 | 42 | 280 | 44 | 442 | 7 |
| Cumberland | 175 | 45 | 73 | 31 | 41 | 12 |
| Essex | 78 | 35 | 176 | 28 | 452 | 15 |
| Gloucester | 348 | 40 | 173 | 41 | 90 | 3 |
| Hudson | 126 | 29 | 78 | 23 | 239 | 6 |
| Mercer | 926 | 39 | 448 | 29 | 204 | 3 |
| Middlesex | 1190 | 42 | 738 | 46 | 348 | 4 |
| Morris | 1407 | 46 | 145 | 40 | 128 | 6 |
| Ocean [1] | 628 | 52 | 209 | 43 | 177 | 16 |
| Passaic | 4 | 50 | 119 | 19 | 111 | 5 |
| Salem | 185 | 47 | 61 | 40 | 47 | 9 |
| Somerset[2] | -- | -- | -- | -- | -- | -- |
| Sussex [3] | -- | -- | -- | -- | -- | -- |
| Union | 560 | 40 | 326 | 30 | 315 | 17 |
| Warren | 87 | N/A | 5 | 100 | 1 | 0 |
| County College Total/ Average % | 8337 | 43 | 4213 | 39 | 3642 | 11 |
| **STATE COLLEGES** | | | | | | |
| Glassboro | 778 | 59 | 279 | 56 | 92 | 21 |
| Jersey City | 278 | 49 | 172 | 44 | 143 | 26 |
| Kean[4] | -- | -- | -- | -- | -- | -- |
| Montclair | 1350 | 70 | 236 | 57 | 26 | 8 |
| Ramapo | 375 | 34 | 43 | 35 | 19 | 5 |
| Stockton[5] | 531 | 57 | 257 | 52 | 17 | 0 |
| Trenton | 702 | 71 | 201 | 65 | 73 | 27 |
| Wm. Paterson | 920 | 46 | 240 | 42 | 88 | 27 |
| Thomas Edison [6] | 38 | 53 | 9 | 22 | 4 | 0 |
| State College Total/ Average % | 4972 | 59 | 1437 | 52 | 462 | 22 |
| **NJIT[4]** | -- | -- | -- | -- | -- | -- |
| **RUTGERS UNIVERSITY [4]** | | | | | | |
| Camden | -- | -- | -- | -- | -- | -- |
| Newark | -- | -- | -- | -- | -- | -- |
| New Brunswick | -- | -- | -- | -- | -- | -- |
| Rutgers University Total/ Average % | -- | -- | -- | -- | -- | -- |

## TABLE 28

### SUCCESSFUL SURVIVAL RATES FOR FALL 1983 ENTERING STUDENTS ACCORDING TO NEED FOR REMEDIATION IN ELEMENTARY ALGEBRA, BY COLLEGE CUMULATIVE THROUGH SPRING 1985

| | NO REMEDIATION * | | COMPLETED REMEDIATION * | | DID NOT COMPLETE REMEDIATION * | |
|---|---|---|---|---|---|---|
| | (N) | SSR ** | (N) | SSR ** | (N) | SSR ** |
| COUNTY COLLEGES | | | | | | |
| Atlantic[1] | -- | -- | -- | -- | -- | -- |
| Bergen | 203 | 33 | 531 | 57 | 1186 | 22 |
| Brookdale | 295 | 56 | 251 | 59 | 545 | 31 |
| Burlington | 166 | 40 | 108 | 36 | 279 | 19 |
| Camden | 709 | 28 | 361 | 50 | 708 | 15 |
| Cumberland | 97 | 56 | 53 | 41 | 13 | 54 |
| Essex | 49 | 39 | 160 | 36 | 497 | 12 |
| Gloucester[2] | N/A | N/A | N/A | N/A | N/A | N/A |
| Hudson | 35 | 40 | 39 | 26 | 153 | 12 |
| Mercer | 694 | 42 | 483 | 39 | 401 | 5 |
| Middlesex | 413 | 48 | 158 | 32 | 90 | 13 |
| Morris | 1486 | 44 | 71 | 48 | 123 | 28 |
| Ocean[3] | 244 | 49 | 3 | 0 | 9 | 11 |
| Passaic | 4 | 0 | 8 | 25 | 4 | 50 |
| Salem[4] | 175 | 29 | 52 | 56 | 12 | 17 |
| Somerset | 353 | 42 | 241 | 33 | 151 | 1 |
| Sussex[5] | -- | -- | -- | -- | -- | -- |
| Union | 380 | 44 | 111 | 38 | 69 | 2 |
| Warren | 30 | N/A | 0 | -- | 0 | -- |
| County College Total/ Average % | 5383 | 42 | 2630 | 47 | 4250 | 18 |
| STATE COLLEGES | | | | | | |
| Glassboro | 459 | 50 | 527 | 63 | 163 | 17 |
| Jersey City | 116 | 58 | 122 | 58 | 40 | 18 |
| Kean | 664 | 58 | 251 | 51 | 78 | 10 |
| Montclair | 609 | 73 | 730 | 63 | 27 | 7 |
| Ramapo | 106 | 29 | 136 | 64 | 195 | 10 |
| Stockton[1] | -- | -- | -- | -- | -- | -- |
| Trenton | 565 | 74 | 303 | 66 | 108 | 28 |
| Wm. Paterson | 1054 | 47 | 113 | 35 | 81 | 16 |
| Thomas Edison[6] | 12 | 59 | 30 | 23 | 9 | 89 |
| State College Total/ Average % | 3585 | 59 | 2222 | 60 | 701 | 16 |
| NJIT[7] | 369 | 50 | 175 | 46 | 38 | 8 |
| RUTGERS UNIVERSITY | | | | | | |
| Camden | 279 | 65 | 32 | 55 | 31 | 48 |
| Newark | 492 | 63 | 94 | 65 | 21 | 19 |
| New Brunswick | 3775 | 75 | 229 | 66 | 432 | 52 |
| Rutgers University Total/ Average % | 4546 | 73 | 355 | 65 | 484 | 50 |

## TABLE 29

### PRE-AND POST-TESTING FOR FINAL LEVEL OF REMEDIATION, FALL 1983 ENTERING STUDENTS
### CUMULATIVE THROUGH SPRING 1985 WHERE AVAILABLE (*); OTHERWISE FALL 1983 TERM
### READING, BY COLLEGE

| COLLEGE | COURSE | TEST ADMINISTERED | TOTAL NO. TESTED | MIN. SCORE NEEDED TO DETERMINE PROFICIENCY | MEAN SCORE | | % ATTAINING MINIMUM LEVEL ON POST-TEST |
|---|---|---|---|---|---|---|---|
| | | | | | PRE-TEST | POST-TEST | |
| COUNTY COLLEGES | | | | | | | |
| Atlantic | No Data | | | | | | |
| Bergen | No Data | | | | | | |
| Brookdale | No Data | | | | | | |
| Burlington | CSK100 | Stanford Diagnostic | 100 | 720 | 678.7 | 755.6 | 84 |
| | | NJCBSPT - RC | 35 | 166 | 157 | 168 | 74 |
| Camden | Basic Reading Skills II* | NJCBSPT - RC | 220 | 32 raw | N/A | N/A | 34 |
| Cumberland | RDG 111 | NJCBSPT - RC | 59 | 165 | 149 | 170 | 91 |
| Essex | RDG-099 | TABE-Form D | 67 | 574 | 547 | 556 | 34 |
| Gloucester | RDG-010* | Stanford - Reading Comprehension | 67 | 10.0 | 7.7 | 8.8 | N/A |
| Hudson | College Reading II* | NJCBSPT-RC | 163 | 165 | 141 | 156 | 36 |
| Mercer | Level II | CTBS Reading-Level 4 | 233 | 622(11.0 GE) | 628.89 | 643.87 | 100 |
| Middlesex | RDG-001* | NJCBSPT - RC | 255 | 162 | 154.9 | 160.5 | 53 |
| Morris | No Data | | | | | | |
| Ocean | No Data | | | | | | |
| Passaic | RD 004 | Stanford-Total Test | 17 | 39 | 33.47 | 38.82 | 53 |
| Salem | No Data | | | | | | |
| Somerset | Critical Reading | NJCBSPT - RC | 81 | N/A | 155 | 148 | 7 |
| Sussex | No Data | | | | | | |
| Union | In-house Essay Administered as Post-test Only | | | | | | |
| Warren | No Data | | | | | | |

## TABLE 30

### PRE-AND POST-TESTING FOR FINAL LEVEL OF REMEDIATION, FALL 1983 ENTERING STUDENTS CUMULATIVE THROUGH SPRING 1985 WHERE AVAILABLE (•); OTHERWISE FALL 1983 TERM READING, BY COLLEGE

| COLLEGE | COURSE | TEST ADMINISTERED | TOTAL NO. TESTED | MIN. SCORE NEEDED TO DETERMINE PROFICIENCY | MEAN SCORE PRE-TEST | MEAN SCORE POST-TEST | % ATTAINING MINIMUM LEVEL ON POST-TEST |
|---|---|---|---|---|---|---|---|
| STATE COLLEGES | | | | | | | |
| Glassboro | Reading & Study Skills Improvement/ Improving Personal Reading Skills• | NJCBSPT - RC | 285 | 168 | 160.0 | 168.5 | 61 |
| Jersey City | Reading Study Skills | Departmental Test | 103 | 20 (70%) | 16.3 | 18.5 | 78 |
| Kean | CS 0411 | Nelson-Denny | 227 | 12.5 GE | 10.5 | 13.6 | N/A |
| Montclair | Basic Reading Skills | Diagnostic Reading Test | 526 | 10 | 9.3 | 10.1 | 60 |
| Ramapo | Dev. Reading• | NJCBSPT - RC | 85 | 168 | 158.4 | 165.6 | 45 |
| Stockton | Study Skills & Critical Thinking | Nelson-Denny-Vocabulary | 260 | N/A | 11.7 | 12.4 | N/A |
| | | -Comprehension | | N/A | 11.0 | 11.5 | N/A |
| | | -Total | | N/A | 11.3 | 12.0 | N/A |
| Trenton | RDG 102 | NJCBSPT - RC | 28 | 166 | 153.0 | 166.0 | 93 |
| Wm. Paterson | RLA 107• | NJCBSPT - RC | 148 | 166 | 152.1 | 164.8 | 92 |
| Thomas Edison | (Not Applicable) | | | | | | |
| NJIT | ENG 108/109• | Stanford Task Test - Form A | 22 | 33 | 23.68 | 38.68 | 73 |
| RUTGERS UNIVERSITY | | | | | | | |
| Camden | No data | | | | | | |
| Newark | No data | | | | | | |
| New Brunswick | No data | | | | | | |

## TABLE 31

## PRE-AND POST-TESTING FOR FINAL LEVEL OF REMEDIATION, FALL 1983 ENTERING STUDENTS CUMULATIVE THROUGH SPRING 1985 WHERE AVAILABLE (*); OTHERWISE FALL 1983 TERM WRITING, BY COLLEGE

| COLLEGE | COURSE | TEST ADMINISTERED | TOTAL NO. TESTED | MIN. SCORE NEEDED TO DETERMINE PROFICIENCY | MEAN SCORE | | % ATTAINING MINIMUM LEVEL ON POST-TEST |
|---|---|---|---|---|---|---|---|
| | | | | | PRE-TEST | POST-TEST | |
| COUNTY COLLEGES | | | | | | | |
| Atlantic | No Data | | | | | | |
| Bergen | No Data | | | | | | |
| Brookdale | No Data | | | | | | |
| Burlington | ESK 070 | NJCBSPT - SS | 276 | 160 | 157.4 | 163.5 | 82 |
| Camden | Basic Writing Skills II* | NJCBSPT - SS & Essay | N/A | N/A | N/A | N/A | N/A |
| Cumberland | ENG 100 | NJCBSPT - SS | 75 | 165 | 151 | 155 | 71 |
| Essex | ENG 095 | DTLS-Sentence Structure | 226 | 24 | 17.3 | 21.8 | 41 |
| Gloucester | COM 010* | NJCBSPT - Total English | 150 | 162 | 152 | 164 | 84 |
| Hudson | Basic English II* | NJCBSPT - SS | 132 | 161 | 146 | 159 | 55 |
| Mercer | Level II | In-house Test | 328 | 42 (70%) | 38.42 | 48.14 | 100 |
| Middlesex | ENG 010 | NJCBSPT - SS | 289 | 162 | 154.1 | 159.2 | 43 |
| Morris | No Data | | | | | | |
| Ocean | No Data | | | | | | |
| Passaic | EN 004* | Developmental Holistic Essay (Administered as Post-test Only) | 25 | 7 | N/A | 7.48 | N/A |
| Salem | No Data | | | | | | |
| Somerset | Basic Composition | NJCBSPT - SS | 97 | N/A | 154 | 157 | 42 |
| Sussex | (No Separate Writing Course in Fall '83) | | | | | | |
| Union | In-house Essay Administered as Post-test Only | | | | | | |
| Warren | (No Separate Writing Course) | | | | | | |

## TABLE 32

### PRE-AND POST-TESTING FOR FINAL LEVEL OF REMEDIATION, FALL 1983 ENTERING STUDENTS CUMULATIVE THROUGH SPRING 1985 WHERE AVAILABLE (•); OTHERWISE FALL 1983 TERM WRITING, BY COLLEGE

| COLLEGE | COURSE | TEST ADMINISTERED | TOTAL NO. TESTED | MIN. SCORE NEEDED TO DETERMINE PROFICIENCY | MEAN SCORE PRE-TEST | MEAN SCORE POST-TEST | % ATTAINING MINIMUM LEVEL ON POST-TEST |
|---|---|---|---|---|---|---|---|
| STATE COLLEGES | | | | | | | |
| Glassboro | Improving Person Writing Skills | In-house Essay | 146 | 7 | 5.8 | 7.8 | 97 |
| Jersey City | College Writing | In-house Essay | 100 | 8 | 4.36 | 8.99 | 43 |
| Kean | ENG 0109 | Writing Sample | 273 | 7/8 | 6.2 | 7.5 | 79/52 |
| Montclair | No Data | | | | | | |
| Ramapo | No Data | | | | | | |
| Stockton | College Writing | Local Essay Test | 283 | N/A | 7.5 | 8.2 | N/A |
| Trenton | No Data | | | | | | |
| Wm. Paterson | ENG 108• | NJCBSPT - Essay | 276 | 7 | 5.5 | 8.3 | 90 |
| Thomas Edison | (Not Applicable) | | | | | | |
| NJIT | No Data | | | | | | |
| RUTGERS UNIVERSITY | | | | | | | |
| Camden | No data | | | | | | |
| Newark | (No Separate Writing Course) | | | | | | |
| New Brunswick | No data | | | | | | |

## TABLE 33

### PRE-AND POST-TESTING FOR FINAL LEVEL OF REMEDIATION, FALL 1983 ENTERING STUDENTS CUMULATIVE THROUGH SPRING 1985 WHERE AVAILABLE (*); OTHERWISE FALL 1983 TERM COMPUTATION, BY COLLEGE

| COLLEGE | COURSE | TEST ADMINISTERED | TOTAL NO. TESTED | MIN. SCORE NEEDED TO DETERMINE PROFICIENCY | MEAN SCORE PRE-TEST | MEAN SCORE POST-TEST | % ATTAINING MINIMUM LEVEL ON POST-TEST |
|---|---|---|---|---|---|---|---|
| COUNTY COLLEGES | | | | | | | |
| Atlantic | No Data | | | | | | |
| Bergen | No Data | | | | | | |
| Brookdale | No Data | | | | | | |
| Burlington | MTH 001 | In-house Test | 82 | 35<br>(possible 48) | 18.96 | 35.35 | 50 |
| Camden | Basic Math Skills II* | NJCBSPT - MC | 506 | 19 raw | N/A | N/A | 100 |
| Cumberland | Math 095 | NJCBSPT - MC | 49 | 165 | 156 | 169 | 100 |
| Essex | Math 081 | Departmental Test | 182 | 21 (70%) | 7.5 | 23.4 | 77 |
| Gloucester | MAT 010* | NJCBSPT - MC | 149 | 165 | 156 | 168 | 57 |
| Hudson | Basic Math II* | NJCBSPT - MC | 97 | 168 | 152 | 166 | 52 |
| Mercer | MS 100 | NJCBSPT - MC | 306 | 175 | 157.4 | 184.45 | 100 |
| Middlesex | Math 010 | NJCBSPT - MC | 77 | 166 | 154.4 | 162.4 | 30 |
| Morris | No Data | | | | | | |
| Ocean | No Data | | | | | | |
| Passaic | MA 004* | NJCBSPT - MC | 22 | 24 | 18.73 | 22.27 | 36 |
| Salem | No Data | | | | | | |
| Somerset | (No Computation Course Until Spring '84) | | | | | | |
| Sussex | MA 010-Computation* | NJCBSPT - MC | 4 | 165 | 152 | 174 | N/A |
| Union | MAT 001 | NJCBSPT - MC | 140 | 165<br>(19 raw) | 12.25 | 22.07 | 93 |
| Warren | No Data | | | | | | |

## TABLE 34

### PRE-AND POST-TESTING FOR FINAL LEVEL OF REMEDIATION, FALL 1983 ENTERING STUDENTS CUMULATIVE THROUGH SPRING 1985 WHERE AVAILABLE (*); OTHERWISE FALL 1983 TERM COMPUTATION, BY COLLEGE

| COLLEGE | COURSE | TEST ADMINISTERED | TOTAL NO. TESTED | MIN. SCORE NEEDED TO DETERMINE PROFICIENCY | MEAN SCORE PRE-TEST | MEAN SCORE POST-TEST | % ATTAINING MINIMUM LEVEL ON POST-TEST |
|---|---|---|---|---|---|---|---|
| STATE COLLEGES | | | | | | | |
| Glassboro | Computation B* | NJCBSPT - MC | 239 | 170 | 161.5 | 173.6 | 84 |
| Jersey City | Developmental Math | In-house Computation | 86 | 30 (possible 40) | 19.3 | 33.1 | 68 |
| Kean | (No Computation Course) | | | | | | |
| Montclair | Dev. Math I-Computation | Computation Inventory | 297 | 25 | 22.3 | 27.2 | 84 |
| Ramapo | Computation* | NJCBSPT - MC/EA | N/A | 24/24 | 21/10.2 | 25/27.8 | 100 |
| Stockton | Quantative Reasoning | NJCBSPT - MC | 240 | 22 (possible 30) | 16.7 | 23.2 | 69.1 |
| | | NJCBSPT - EA | 240 | 22 (possible 30) | 11.7 | 14.4 | N/A |
| | | CA Achievement-Computation | 235 | N/A | 10.0 | 11.5 | N/A |
| | | -Concepts & Problems | 235 | N/A | 10.6 | 11.7 | N/A |
| | | -Total | 235 | N/A | 10.3 | 11.7 | N/A |
| Trenton | MAT 091 | NJCBSPT - MC | 42 | 171 | 164 | 173 | 100 |
| Wm. Paterson | MATH 101* | NJCBSPT - MC | 145 | 169 | 154.0 | 173.0 | 88 |
| Thomas Edison | (Not Applicable) | | | | | | |
| NJIT | (No Computation Course) | | | | | | |
| RUTGERS UNIVERSITY | | | | | | | |
| Camden | (No Computation Course) | | | | | | |
| Newark | (No Computation Course) | | | | | | |
| New Brunswick | (No Computation Course) | | | | | | |

## TABLE 35

### PRE-AND POST-TESTING FOR FINAL LEVEL OF REMEDIATION, FALL 1983 ENTERING STUDENTS CUMULATIVE THROUGH SPRING 1985 WHERE AVAILABLE (*); OTHERWISE FALL 1983 TERM ELEMENTARY ALGEBRA, BY COLLEGE

| COLLEGE | COURSE | TEST ADMINISTERED | TOTAL NO. TESTED | MIN. SCORE NEEDED TO DETERMINE PROFICIENCY | MEAN SCORE PRE-TEST | MEAN SCORE POST-TEST | % ATTAINING MINIMUM LEVEL ON POST-TEST |
|---|---|---|---|---|---|---|---|
| COUNTY COLLEGES | | | | | | | |
| Atlantic | (No Algebra Course) | | | | | | |
| Bergen | No Data | | | | | | |
| Brookdale | No Data | | | | | | |
| Burlington | MTH 002 | In-house Test | 61 | 12 | 8.05 | 17.16 | 100 |
| Camden | No Data | | | | | | |
| Cumberland | MATH 100 | NJCBSPT - EA | 86 | 169 | 152 | 165 | 92 |
| Essex | MATH 091 | Departmental Test | 164 | 21 (70%) | 7.5 | 20.3 | 55 |
| Gloucester | No Data | | | | | | |
| Hudson | Basic Algebra* | NJCBSPT - EA | 31 | 167 | 158 | 169 | 58 |
| Mercer | MS 110 | NJCBSPT - EA | 132 | 179(?) | 158.18 | 176.46 | 100(?) |
| Middlesex | Math 018 | NJCBSPT - EA | 43 | 167 | 157.5 | 178.9 | 84 |
| Morris | No Data | | | | | | |
| Ocean | No Data | | | | | | |
| Passaic | No Data | | | | | | |
| Salem | No Data | | | | | | |
| Somerset | Elementary Algebra | NJCBSPT - EA | 136 | N/A | 156 | 172 | 89 |
| Sussex | MA 010-Algebra* | NJCBSPT - EA | 5 | 167 | 150 | 175 | N/A |
| Union | MAT 002 | NJCBSPT - EA | 89 | 166<br>(13.5 raw) | 7.83 | 20.33 | 98 |
| Warren | No Data | | | | | | |

TABLE 36

PRE-AND POST-TESTING FOR FINAL LEVEL OF REMEDIATION, FALL 1983 ENTERING STUDENTS
CUMULATIVE THROUGH SPRING 1985 WHERE AVAILABLE (*); OTHERWISE FALL 1983 TERM
ELEMENTARY ALGEBRA, BY COLLEGE

| COLLEGE | COURSE | TEST ADMINISTERED | TOTAL NO. TESTED | MIN. SCORE NEEDED TO DETERMINE PROFICIENCY | MEAN SCORE | | % ATTAINING MINIMUM LEVEL ON POST-TEST |
|---|---|---|---|---|---|---|---|
| | | | | | PRE-TEST | POST-TEST | |
| STATE COLLEGES | | | | | | | |
| Glassboro | Algebra B* | NJCBSPT - EA | 475 | 175 | 165.4 | 180.4 | 91 |
| Jersey City | No Data | | | | | | |
| Kean | MA 0150 | Local Test | 107 | 35 | 15.1 | 40.1 | 77 |
| Montclair | Dev. Math II-Algebra | Algebra Inventory | 676 | 24 | 16.3 | 26.4 | 79 |
| Ramapo | Elem. Algebra* | NJCBSPT - MC/EA | N/A | 24 | 11.69 | 25.47 | 100 |
| Stockton | (No Algebra Course) | | | | | | |
| Trenton | MAT 092 | NJCBSPT - EA | 99 | 176 | 154.0 | 176.0 | 98 |
| Wm. Paterson | MATH 105* | NJCBSPT - EA | 57 | 176 | 157.0 | 177.4 | 73 |
| Thomas Edison | (Not Applicable) | | | | | | |
| NJIT | No Data | | | | | | |
| RUTGERS UNIVERSITY | | | | | | | |
| Camden | No Data | | | | | | |
| Newark | No Data | | | | | | |
| New Brunswick | No Data | | | | | | |

## TABLE 37

## PERFORMANCE OF FALL 1983 ENTERING, FULL-TIME STUDENTS IN FIRST COLLEGE-LEVEL COURSE IN ENGLISH COMPOSITION ACCORDING TO NEED FOR REMEDIATION IN READING, BY COLLEGE THROUGH SPRING 1985

| | NO NEED FOR REMEDIATION | | NEEDED AND COMPLETED REMEDIATION | |
|---|---|---|---|---|
| | No. Enrolled | % Pass | No. Enrolled | % Pass |
| COUNTY COLLEGES | | | | |
| Atlantic | 166 | 84 | 39 | 90 |
| Bergen | 1404 | 78 | 549 | 75 |
| Brookdale | 520 | 83 | 207 | 84 |
| Burlington | 275 | 73 | 129 | 74 |
| Camden [1] | 602 | 74 | 199 | 66 |
| Cumberland | 167 | 83 | 56 | 80 |
| Essex | 78 | 54 | 31 | 65 |
| Gloucester | 411 | 76 | 55 | 75 |
| Hudson | 82 | 67 | 147 | 59 |
| Mercer | 134 | 87 | 185 | 82 |
| Middlesex | 1110 | 78 | 358 | 75 |
| Morris | 1159 | 88 | 225 | 91 |
| Ocean | N/A | N/A | N/A | N/A |
| Passaic | 39 | 80 | 65 | 55 |
| Salem | 144 | 83 | 39 | 89 |
| Somerset | 478 | 92 | 132 | 92 |
| Sussex [2] | -- | -- | -- | -- |
| Union | 302 | 94 | 150 | 89 |
| Warren | 79 | N/A | 5 | 100 |
| County College Total/Average % | 7150 | 81 | 2582 | 78 |

## TABLE 38

## PERFORMANCE OF FALL 1983 ENTERING, FULL-TIME STUDENTS IN FIRST COLLEGE-LEVEL COURSE IN ENGLISH COMPOSITION ACCORDING TO NEED FOR REMEDIATION IN READING, BY COLLEGE THROUGH SPRING 1985

| | NO NEED FOR REMEDIATION | | NEEDED AND COMPLETED REMEDIATION | |
|---|---|---|---|---|
| | No. Enrolled | % Pass | No. Enrolled | % Pass |
| STATE COLLEGES | | | | |
| Glassboro | 677 | 86 | 290 | 81 |
| Jersey City | 325 | 83 | 79 | 65 |
| Kean | 660 | 88 | 209 | 88 |
| Montclair | 811 | 99 | 334 | 99 |
| Ramapo | 111 | 96 | 73 | 91 |
| Stockton | 57 | 93 | 80 | 86 |
| Trenton | 736 | 98 | 137 | 92 |
| William Paterson | 623 | 86 | 187 | 80 |
| Thomas Edison[1] | -- | -- | -- | -- |
| State College Total/Average % | 4000 | 91 | 1389 | 87 |
| NJIT | 426 | 89 | 19 | 74 |
| RUTGERS UNIVERSITY | | | | |
| Camden | 233 | 97 | 81 | 95 |
| Newark | 433 | 95 | 54 | 93 |
| New Brunswick | 3339 | 97 | 234 | 83 |
| Rutgers University Total/Average % | 4005 | 97 | 369 | 87 |

## TABLE 39

## PERFORMANCE OF FALL 1983 ENTERING, FULL-TIME STUDENTS IN FIRST COLLEGE-LEVEL COURSE IN ENGLISH COMPOSITION ACCORDING TO NEED FOR REMEDIATION IN WRITING, BY COLLEGE THROUGH SPRING 1985

| | NO NEED FOR REMEDIATION | | NEEDED AND COMPLETED REMEDIATION | |
|---|---|---|---|---|
| | No. Enrolled | % Pass | No. Enrolled | % Pass |
| COUNTY COLLEGES | | | | |
| Atlantic | 358 | 85 | 64 | 77 |
| Bergen | 1025 | 80 | 205 | 71 |
| Brookdale | 531 | 84 | 164 | 77 |
| Burlington | 235 | 85 | 242 | 84 |
| Camden[1] | 514 | 75 | 295 | 67 |
| Cumberland | 147 | 84 | 89 | 79 |
| Essex | 73 | 54 | 145 | 64 |
| Gloucester | 337 | 78 | 129 | 72 |
| Hudson | 82 | 67 | 139 | 60 |
| Mercer | 80 | 88 | 318 | 77 |
| Middlesex | 1237 | 79 | 376 | 73 |
| Morris | 1186 | 89 | 244 | 84 |
| Ocean | N/A | N/A | N/A | N/A |
| Passaic | 23 | 91 | 97 | 55 |
| Salem | 138 | 80 | 45 | 96 |
| Somerset | 516 | 93 | 67 | 85 |
| Sussex[2] | -- | -- | -- | -- |
| Union | 323 | 96 | 169 | 85 |
| Warren[3] | -- | -- | -- | -- |
| County College Total/Average % | 6905 | 83 | 2790 | 75 |

## TABLE 40

## PERFORMANCE OF FALL 1983 ENTERING, FULL-TIME STUDENTS IN FIRST COLLEGE-LEVEL COURSE IN ENGLISH COMPOSITION ACCORDING TO NEED FOR REMEDIATION IN WRITING, BY COLLEGE THROUGH SPRING 1985

| | NO NEED FOR REMEDIATION | | NEEDED AND COMPLETED REMEDIATION | |
|---|---|---|---|---|
| | No. Enrolled | % Pass | No. Enrolled | % Pass |
| STATE COLLEGES | | | | |
| Glassboro | 769 | 87 | 240 | 69 |
| Jersey City | 382 | 80 | 130 | 80 |
| Kean | 622 | 89 | 263 | 84 |
| Montclair | 1052 | 99 | 176 | 97 |
| Ramapo | 41 | 83 | 81 | 85 |
| Stockton | 24 | 83 | 112 | 91 |
| Trenton | 640 | 98 | 228 | 93 |
| William Paterson | 627 | 85 | 240 | 78 |
| Thomas Edison [1] | -- | -- | -- | -- |
| State College Total/Average % | 4157 | 91 | 1470 | 84 |
| NJIT | 384 | 89 | 51 | 34 |
| RUTGERS UNIVERSITY | | | | |
| Camden | 256 | 97 | 58 | 95 |
| Newark [2] | -- | -- | -- | -- |
| New Brunswick | 3244 | 97 | 525 | 89 |
| Rutgers University Total/Average % | 3500 | 97 | 583 | 89 |

## TABLE 41

### PERFORMANCE OF FALL 1983 ENTERING, FULL-TIME STUDENTS IN FIRST COLLEGE-LEVEL COURSE IN MATHEMATICS ACCORDING TO NEED FOR REMEDIATION IN COMPUTATION, BY COLLEGE THROUGH SPRING 1985

| | NO NEED FOR REMEDIATION | | NEEDED AND COMPLETED REMEDIATION | |
|---|---|---|---|---|
| | No. Enrolled | % Pass | No. Enrolled | % Pass |
| COUNTY COLLEGES | | | | |
| Atlantic | 129 | 84 | 70 | 76 |
| Bergen | 146 | 65 | 94 | 57 |
| Brookdale | 129 | 65 | 26 | 34 |
| Burlington | 72 | 74 | 33 | 30 |
| Camden [1] | 415 | 59 | 97 | 56 |
| Cumberland | 136 | 71 | 17 | 53 |
| Essex | 25 | 72 | 33 | 67 |
| Gloucester | 275 | 72 | 115 | 65 |
| Hudson | 31 | 87 | 62 | 55 |
| Mercer | 200 | 73 | 150 | 63 |
| Middlesex | 878 | 75 | 142 | 59 |
| Morris | 104 | 75 | 2 | 100 |
| Ocean | N/A | N/A | N/A | N/A |
| Passaic | 5 | 80 | 13 | 54 |
| Salem | 46 | 89 | 21 | 90 |
| Somerset [2] | -- | -- | -- | -- |
| Sussex [3] | -- | -- | -- | -- |
| Union | 128 | 87 | 32 | 72 |
| Warren | 87 | N/A | 5 | 100 |
| County College Total/Average % | 2806 | 74 | 912 | 61 |

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## TABLE 42

## PERFORMANCE OF FALL 1983 ENTERING, FULL-TIME STUDENTS IN FIRST COLLEGE-LEVEL COURSE IN MATHEMATICS ACCORDING TO NEED FOR REMEDIATION IN COMPUTATION, BY COLLEGE THROUGH SPRING 1985

| | NO NEED FOR REMEDIATION | | NEEDED AND COMPLETED REMEDIATION | |
|---|---|---|---|---|
| | No. Enrolled | % Pass | No. Enrolled | % Pass |
| **STATE COLLEGES** | | | | |
| Glassboro | 370 | 84 | 52 | 73 |
| Jersey City | 105 | 70 | 18 | 67 |
| Kean [1] | -- | -- | -- | -- |
| Montclair | 662 | 97 | 40 | 58 |
| Ramapo | 84 | 92 | 2 | 100 |
| Stockton | 17 | 94 | 12 | 92 |
| Trenton | 177 | 93 | 79 | 82 |
| William Paterson | 159 | 82 | 22 | 77 |
| Thomas Edison [2] | -- | -- | -- | -- |
| State College Total/Average % | 1574 | 90 | 235 | 75 |
| NJIT [1] | -- | -- | -- | -- |
| RUTGERS UNIVERSITY [1] | | | | |
| Camden | -- | -- | -- | -- |
| Newark | -- | -- | -- | -- |
| New Brunswick | -- | -- | -- | -- |
| Rutgers University Total/Average % | -- | -- | -- | -- |

## TABLE 43

## PERFORMANCE OF FALL 1983 ENTERING, FULL-TIME STUDENTS IN FIRST COLLEGE-LEVEL COURSE IN MATHEMATICS ACCORDING TO NEED FOR REMEDIATION IN ELEMENTARY ALGEBRA, BY COLLEGE THROUGH SPRING 1985

| | NO NEED FOR REMEDIATION | | NEEDED AND COMPLETED REMEDIATION | |
|---|---|---|---|---|
| | No. Enrolled | % Pass | No. Enrolled | % Pass |
| COUNTY COLLEGES | | | | |
| Atlantic [1] | -- | -- | -- | -- |
| Bergen | 15 | 87 | 208 | 59 |
| Brookdale | 74 | 62 | 85 | 57 |
| Burlington | 106 | 80 | 36 | 67 |
| Camden [2] | 224 | 70 | 249 | 66 |
| Cumberland | 124 | 71 | 24 | 54 |
| Essex | 9 | 89 | 53 | 51 |
| Gloucester [3] | N/A | N/A | N/A | N/A |
| Hudson | 13 | 92 | 41 | 63 |
| Mercer | 88 | 83 | 232 | 66 |
| Middlesex | 287 | 77 | 102 | 62 |
| Morris | 86 | 74 | 15 | 93 |
| Ocean | N/A | N/A | N/A | N/A |
| Passaic | N/A | N/A | 2 | 100 |
| Salem | 39 | 90 | 40 | 86 |
| Somerset | 153 | 88 | 147 | 82 |
| Sussex [4] | -- | -- | -- | -- |
| Union | 80 | 95 | 31 | 74 |
| Warren | 80 | N/A | 0 | -- |
| County College Total/Average % | 1378 | 78 | 1275 | 66 |

## TABLE 44

### PERFORMANCE OF FALL 1983 ENTERING, FULL-TIME STUDENTS IN FIRST COLLEGE-LEVEL COURSE IN MATHEMATICS ACCORDING TO NEED FOR REMEDIATION IN **ELEMENTARY ALGEBRA**, BY COLLEGE THROUGH SPRING 1985

| | NO NEED FOR REMEDIATION | | NEEDED AND COMPLETED REMEDIATION | |
|---|---|---|---|---|
| | No. Enrolled | % Pass | No. Enrolled | % Pass |
| STATE COLLEGES | | | | |
| Glassboro | 170 | 88 | 103 | 67 |
| Jersey City | 82 | 72 | 27 | 67 |
| Kean | 375 | 83 | 86 | 71 |
| Montclair | 256 | 90 | 427 | 93 |
| Ramapo | 45 | 93 | 67 | 89 |
| Stockton [1] | -- | -- | -- | -- |
| Trenton | 135 | 92 | 117 | 86 |
| William Paterson | 80 | 79 | 58 | 78 |
| Thomas Edison [2] | -- | -- | -- | -- |
| State College Total/Average % | 1143 | 86 | 885 | 85 |
| NJIT [3] | 289 | 85 | 148 | 82 |
| RUTGERS UNIVERSITY | | | | |
| Camden | 90 | 97 | 4 | 100 |
| Newark | 221 | 91 | 67 | 82 |
| New Brunswick | 1254 | 87 | 147 | 57 |
| Rutgers University Total/Average % | 1565 | 88 | 218 | 72 |

## FOOTNOTES TO TABLES

### Table 1

[1] Institution does not offer a remedial course in algebra.

[2] Course integrates reading and writing.

[3] Passing defined as a grade of "C" or better, or "pass".

[4] Passing defined as a grade of "C" or better.

[5] Institution did not offer a computation course in 1983.

[6] Not applicable. Only part-time students are tested and tracked (full-time data reported by other institutions).

[7] Institution does not offer a separate writing course.

### Table 2

[1] Institution does not offer a course in computation.

[2] Includes 18 students enrolled in Intermediate Algebra, which the institution does not consider a remedial course.

[3] BASK 1102: "Study Skills and Critical Thinking."

[4] BASK 1103: "Quantitative Reasoning."

[5] Institution does not offer a remedial course in algebra.

[6] Not applicable. Institution reports students as part-time only.

[7] Course integrates reading and writing.

[8] Course includes trigonometry.

[9] Institution does not offer a separate writing course.

Table 3

[1] Institution does not offer a remedial course in algebra.

[2] Course integrates reading and writing.

[3] Not applicable, since part-time students do not enroll in programs requiring algebra.

[4] Passing defined as a grade of "C" or better, or "pass."

[5] Passing defined as a grade of "C" or better.

[6] Institution did not offer a computation course in 1983.

[7] Institution did not offer a separate writing course in 1983.

[8] Basic mathematics and algebra reported together.

[9] Institution does not offer a separate writing course.

Table 4

[1] Institution does not offer a course' in computation.

[2] BASK 1102: "Study Skills and Critical Thinking."

[3] BASK 1103: "Quantitative Reasoning."

[4] Institution does not offer a remedial course in algebra.

[5] Course integrates reading and writing.

[6] Institution does not offer a separate writing course.

### Tables 5, 9, 13

*See "Guidelines For Preparation of Institutional Report on Remedial Program Effectiveness" (Appendix) for definition of study groups.

[1] Course integrates reading and writing.

[2] Students who fail to complete remediation are not permitted to take college-level courses.

[3] Second study group ("completed remediation") defined by institution as obtaining a grade of "C" or better, or "pass."

[4] Not applicable. Only part-time students are tested and tracked (full-time data reported by other institutions.

[5] BASK 1102: "Study Skills and Critical Thinking."

[6] Institution reports students as part-time only. Most follow-up data not applicable, since courses are taught elsewhere.

[7] Criterion for completion (second and third study groups) is enrollment in English 101, even though a student may not have enrolled in remediation.

[8] Additional data, received too late for compilation, render this value somewhat inaccurate. Refer to institution's profile (page 156) for explanation.

### Tables 6, 10, 14

*See "Guidelines For Preparation of Institutional Report on Remedial Program Effectiveness" (Appendix) for definition of study groups.

[1] Second study group ("completed remediation") defined by institution as obtaining a grade of "C" or better, or "pass".

[2] Not applicable. Only part-time students are tested and tracked (full-time data reported by other institutions).

[3] Institution offers a course that integrates reading and writing. These data are reported under reading.

[4] Institution reports students as part-time only. Most follow-up data not applicable, since courses are taught elsewhere.

[5] Criterion for completion (second and third study groups) is enrollment in English 101, even though a student may not have enrolled in remediation.

[6] Additional data, received too late for compilation, render this value somewhat inaccurate. Refer to institution's profile copy (page 156) for explanation.

Tables 7, 11, 15

*See "Guidelines For Preparation of Institutional Report on Remedial Program Effectiveness" (Appendix) for definition of study groups.

[1] Second study group ("completed remediation") defined by institution as obtaining a grade of "C" or better, or "pass".

[2] Institution did not offer a computation course in 1983.

[3] Not applicable. Only part-time students are tested and tracked (full-time data reported by other institutions).

[4] Institution does not offer a course in computation.

[5] BASK 1103: "Quantitative Reasoning."

[6] Institution reports students as part-time only. Most follow-up data not applicable, since courses are taught elsewhere.

Tables 8, 12, 16

*See "Guidelines For Preparation of Institutional Report on Remedial Program Effectiveness" (Appendix) for definition of study groups.

[1] Institution does not offer a remedial algebra course.

[2] Institution not able to provide data for its elementary and intermediate algebra courses.

[3] Second study group ("completed remediation") defined by institution as obtaining a grade of "C" or better, or "pass."

[4] Second study group ("completed remediation") includes students who were not required to take remedial course but took it.

[5] Not applicable. Only part-time students are tested and tracked (full-time data reported by other institutions).

[6] Institution reports students as part-time only. Most follow-up data not applicable, since courses are taught elsewhere.

[7] Course includes trigonometry and intermediate algebra.

Tables 17, 21

*See "Guidelines For Preparation of Institutional Report on Remedial Program Effectiveness" (Appendix) for definition of study groups.

[1] Course integrates reading and writing.

[2] Institution's "non-punitive" grading system (2.0-4.0) does not allow for meaningful GPA comparisons with other colleges.

[3] Students who fail to complete remediation are not permitted to take college-level courses.

[4] Second study group ("completed remediation") defined by institution as obtaining a grade of "C" or better, or "pass."

[5] Not applicable. Only part-time students are tested and tracked (full-time data reported by other institutions.

[6] BASK 1102: "Study Skills and Critical Thinking."

[7] Institution reports students as part-time only. Most follow-up data not applicable, since courses are taught elsewhere.

[8] Criterion for completion (second and third study groups) is enrollment in English 101, even though a student may not have enrolled in remediation.

[9] Additional data, received too late for compilation, render this value somewhat inaccurate. Refer to institution's profile (page 156) for explanation.

Tables 18, 22

*See "Guidelines For Preparation of Institutional Report on Remedial Program Effectiveness" (Appendix) for definition of study groups.

[1] Institution's "non-punitive" grading system (2.0-4.0) does not allow for meaningful GPA comparisons with other colleges.

[2] Second study group ("completed remediation") defined by institution as obtaining a grade of "C" or better, or "pass".

[3] Not applicable. Only part-time students are tested and tracked (full-time data reported by other institutions).

[4] Institution offers a course that integrates reading and writing. These data are reported under reading.

[5] Institution reports students as part-time only. Most follow-up data not applicable, since courses are taught elsewhere.

[6] Criterion for completion (second and third study groups) is enrollment in English 101, even though a student may not have enrolled in remediation.

[7] Additional data, received too late for compilation, render this value somewhat inaccurate. Refer to institution's profile copy (page 156) for explanation.

Tables 19, 23

*See "Guidelines For Preparation of Institutional Report on Remedial Program Effectiveness" (Appendix) for definition of study groups.

[1] Institution's "non-punitive" grading system (2.0-4.0) does not allow for meaningful GPA comparisons with other colleges.

[2] Second study group ("completed remediation") defined by institution as obtaining a grade of "C" or better, or "pass".

[3] Institution did not offer a computation course in 1983.

[4] Not applicable. Only part-time students are tested and tracked (full-time data reported by other institutions).

[5] Institution does not offer a course in computation.

[6] BASK 1103: "Quantitative Reasoning."

[7] Institution reports students as part-time only. Most follow-up data not applicable, since courses are taught elsewhere.

Tables 20, 24

*See "Guidelines For Preparation of Institutional Report on Remedial Program Effectiveness" (Appendix) for definition of study groups.

[1] Institution does not offer a remedial algebra course.

[2] Institution's "non-punitive" grading system (2.0-4.0) does not allow for meaningful GPA comparisons with other colleges.

[3] Institution not able to provide data for its elementary and intermediate algebra courses.

[4] Second study group ("completed remediation") defined by institution as obtaining a grade of "C" or better, or "pass."

[5]Second study group ("completed remediation") includes students who were not required to take remedial course but took it.

[6]Not applicable. Only part-time students are tested and tracked (full-time data reported by other institutions).

[7]Institution reports students as part-time only. Most follow-up data not applicable, since courses are taught elsewhere.

[8]Course includes trigonometry and intermediate algebra.

Table 25

*See "Guidelines For Preparation of Institutional Report on Remedial Program Effectiveness" (Appendix) for definition of study groups.

**Represents the percentage of the Fall 1983 entering students who were still enrolled at the institution in the Spring 1985 semester and who attained a cumulative grade point average of 2.0 or better at the end of Spring 1985.

[1]Course integrates reading and writing.

[2]Not applicable, since students who fail to complete remediation are not permitted to take college-level courses.

[3]Second study group ("completed remediation") defined by institution as obtaining a grade of "C" or better, or "pass."

[4]For cumulative data, note that at the time this cohort entered, students in some programs were not required to complete remediation in reading.

[5]Not applicable. Only part-time students are tested and tracked (full-time data reported by other institutions).

[6]BASK 1102: "Study Skills and Critical Thinking."

[7] Institution reports students as part-time only. Most follow-up data not applicable, since courses are taught elsewhere.

[8] Criterion for completion (second and third study groups) is enrollment in English 101, even though a student may not have enrolled in remediation.

[9] Additional data, received too late for compilation, render this value somewhat inaccurate. Refer to institution's profile (page 156) for explanation.

Table 26

*See "Guidelines For Preparation of Institutional Report on Remedial Program Effectiveness" (Appendix) for definition of study groups.

**Represents the percentage of the Fall 1983 entering students who were still enrolled at the institution in the Spring 1985 semester and who attained a cumulative grade point average of 2.0 or better at the end of Spring 1985.

[1] Second study group ("completed remediation") defined by institution as obtaining a grade of "C" or better, or "pass."

[2] Not applicable. Only part-time students are tested and tracked (full-time data reported by other institutions).

[3] Institution offers a course that integrates reading and writing. These data are reported under reading.

[4] Institution reports students as part-time only. Most follow-up data not applicable, since courses are taught elsewhere.

[5] Criterion for completion (second and third study groups) is enrollment in English 101, even though a student may not have enrolled in remediation.

[6] Additional data, received too late for compilation, render this value somewhat inaccurate. Refer to institution's profile (page 156) for explanation.

Table 27

*See "Guidelines For Preparation of Institutional Report on Remedial Program Effectiveness" (Appendix) for definition of study groups.

**Represents the percentage of the Fall 1983 entering students who were still enrolled at the institution in the Spring 1985 semester and who attained a cumulative grade point average of 2.0 or better at the end of Spring 1985.

[1] Second study group ("completed remediation") defined by institution as obtaining a grade of "C" or better, or "pass."

[2] Institution did not offer a computation course in 1983.

[3] Not applicable. Only part-time students are tested and tracked (full-time data reported by other institutions).

[4] Institution does not offer a course in computation.

[5] BASK 1103: "Quantitative Reasoning."

[6] Institution reports students as part-time only. Most follow-up data not applicable, since courses are taught elsewhere.

Table 28

*See "Guidelines For Preparation of Institutional Report on Remedial Program Effectiveness" (Appendix) for definition of study groups.

**Represents the percentage of the Fall 1983 entering students who were still enrolled at the institution in the Spring 1985 semester and who attained a cumulative grade point average of 2.0 or better at the end of Spring 1985.

[1] Institution does not offer a remedial algebra course.

[2] Institution not able to provide data for its elementary and intermediate algebra courses.

[3] Second study group ("completed remediation") defined by institution as obtaining a grade of "C" or better, or "pass."

[4] Second study group ("completed remediation") includes students who were not required to take remedial course but took it.

[5] Not applicable. Only part-time students are tested and tracked (full-time data reported by other institutions).

[6] Institution reports students as part-time only. Most follow-up data not applicable, since courses are taught elsewhere.

[7] Course includes trigonometry and intermediate algebra.

Table 37

[1] First attempt at course only (explicit).

[2] Not applicable. Only part-time students are tested and tracked (full-time data reported by other institutions).

Table 38

[1] Not applicable, since courses are taught elsewhere.

Table 39

[1] First attempt at course only (explicit).

[2] Not applicable. Only part-time students are tested and tracked (full-time data reported by other institutions).

[3] Not applicable. Refer to data reported under reading.

Table 40

[1] Not applicable, since courses are taught elsewhere.

[2] Not applicable. Refer to data reported under reading.

Table 41

[1] First attempt at course only (explicit).

[2] Institution did not offer computation remediation in 1983.

[3] Not applicable. Only part-time students are tested and tracked (full-time data reported by other institutions).

Table 42

[1] Institution does not offer a course in computation.

[2] Not applicable, since courses are taught elsewhere.

Table 43

[1] Institution does not offer a remedial algebra course.

[2] First attempt at course only (explicit).

[3] Institution not able to provide data for its elementary and intermediate algebra courses.

[4] Not applicable. Only part-time students are tested and tracked (full-time data reported by other institutions).

Table 44

[1] Institution does not offer a remedial algebra course.

[2] Not applicable, since courses are taught elsewhere.

[3] Remediation consists of trigonometry and intermediate algebra.

# REMEDIAL PROGRAM PROFILES OF INDIVIDUAL COLLEGES

The Remedial Program Profiles for individual institutions are each divided into three parts. The first part is a tabular presentation of the relevant data as reported by the college. It includes the criteria the college used for placement in the fall of 1983, followed by a section giving the percentages of students identified for remediation, enrolled in remediation and reaching minimum competency at the end of the college's remedial course sequence. The placement criteria given are the scores (or combination of scores) below which students are placed into a remedial course. Cumulative outcome data are then given by remedial skill area for each of the three study groups (remediation not needed, remediation completed and remediation not completed).

The second part is a bar graph of the cumulative successful survival rate for the three study groups in each of the four remedial areas. Inspection of this graph can yield information on the relationships between the non-remedial and remediation-completed groups. It also allows for a comparison among the remedial program areas of the college being displayed.

The third part of the Remedial Program Profiles is a narrative interpretation of the data for each institution. The narrative is meant as a suggested interpretation of the data, taking into account, where possible, the sample size, the percent reaching the minimum criteria for placement into regular classes at the institution, and the college's narrative description of its programs.

The remarks are not meant to be an in-depth analysis of all aspects of an institution's remedial programs. Site visits are required for a more complete analysis. Most important here is the relative difference between the "no need" groups and the "remediation-completed" groups within each institution. Anomalous patterns and/or perceived weaknesses in programs are explicitly pointed out, where appropriate. Each institution was given the opportunity to review both the data and the narrative before publication. Where inadequacies are cited, the Council makes such comment for the purpose of stimulating improvement at the college.

## ATLANTIC COMMUNITY COLLEGE

### 1983 FULL-TIME COHORT

Students Tested: 549 98 %

### Placement Criteria

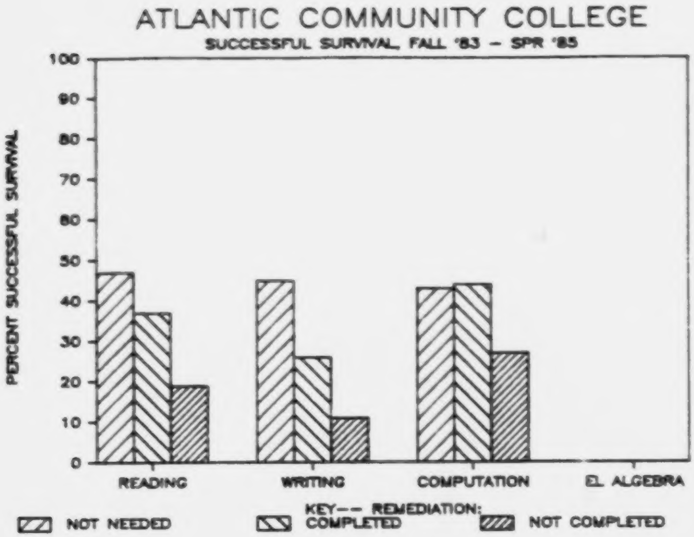
Reading: NJCBSPT RC 166
Writing: NJCBSPT SS 163
Computation: NJCBSPT MC 165
El. Algebra: (No algebra course)

### Course Placement, Enrollment and Outcomes

| | Reading | Writing | Computation | El. Algebra |
|---|---|---|---|---|
| % Identified | 48 | 26 | 53 | |
| % Enrolled | 63 | 78 | 57 | |
| % Passing Final Remedial Course | 80 | 81 | 70 | |
| % Reaching Minimum Competency | N/A | N/A | N/A | |

### Cumulative Four-semester Follow Up

| | Remediation Not Needed | Remediation Completed | Remediation Not Completed |
|---|---|---|---|
| **Reading:** | | | |
| # Returned Spring 1985 (%) | 132 (52) | 72 (53) | 30 (29) |
| % GPA Greater Than/Equal to 2.0 | 91 | 70 | 65 |
| % Successful Survival | 47 | 37 | 19 |
| % Passing First College-level Course | 84 | 90 | -- |
| **Writing:** | | | |
| # Returned Spring 1985 (%) | 195 (52) | 40 (45) | 5 (19) |
| % GPA Greater Than/Equal to 2.0 | 86 | 58 | 60 |
| % Successful Survival | 45 | 26 | 11 |
| % Passing First College-level Course | 86 | 77 | -- |
| **Computation:** | | | |
| # Returned Spring 1985 (%) | 116 (50) | 70 (62) | 66 (42) |
| % GPA Greater Than/Equal to 2.0 | 86 | 71 | 65 |
| % Successful Survival | 43 | 44 | 27 |
| % Passing First College-level Course | 84 | 76 | -- |
| **Elementary Algebra:** | | | |
| # Returned Spring 1985 (%) | | | |
| % GPA Greater Than/Equal to 2.0 | | | |
| % Successful Survival | | | |
| % Passing First College-level Course | | | |



## REMEDIAL PROGRAM REMARKS

Students completing remediation at Atlantic in both reading and computation had higher retention rates than non-remedial students. In reading, writing and computation the performance in first college-level courses for students who completed remediation was close to the performance of students who did not need remediation.

No data were reported for the elementary algebra group because no algebra course is given at this college. The consequence of this for students who may be weak in algebraic skills and pursue higher level mathematics courses ought to be investigated by the college. The successful survival rates of students who complete the computation courses are more than equal to those of non-remedial students, but both the retention rate and the successful survival rate for students not completing remediation in mathematics appear high.

No post-testing data was presented for any discipline, nor any data on the percentage of students reaching minimum competence upon exiting remediation.

# BERGEN COMMUNITY COLLEGE

## 1983 FULL-TIME COHORT

Students Tested: 1920 100%

### Placement Criteria

| | |
|---|---|
| Reading*: | NJCBSPT RC & SS 161 average |
| Writing: | NJCBSPT RC & SS 161-164** average |
| Computation: | NJCBSPT MC 168 |
| El. Algebra: | NJCBSPT EA 183 and curriculum requiring algebra |

### Course Placement, Enrollment and Outcomes

| | Reading* | Writing | Computation | El. Algebra |
|---|---|---|---|---|
| % Identified | 39 | 17 | 64 | 89 |
| % Enrolled | 89 | 96 | 92 | 52 |
| % Passing Final Remedial Course | 85 | 59 | 73 | 63 |
| % Reaching Minimum Competency | N/A | N/A | N/A | N/A |

### Cumulative Four-semester Follow Up

| | Remediation Not Needed | Remediation Completed | Remediation Not Completed |
|---|---|---|---|
| Reading*: | | | |
| # Returned Spring 1985 (%) | 547 (47) | 287 (51) | 19 (10) |
| GPA Greater Than/Equal to 2.0 | 82 | 63 | 16 |
| % Successful Survival | 39 | 32 | 2 |
| % Passing First College-level Course | 78 | 75 | -- |
| Writing: | | | |
| # Returned Spring 1985 (%) | 407 (49) | 104 (59) | 25 (18) |
| % GPA Greater Than/Equal to 2.0 | 85 | 78 | 52 |
| % Successful Survival | 42 | 46 | 9 |
| % Passing First College-level Course | 80 | 71 | -- |
| Computation: | | | |
| # Returned Spring 1985 (%) | 353 (51) | 436 (53) | 64 (16) |
| % GPA Greater Than/Equal to 2.0 | 82 | 73 | 44 |
| % Successful Survival | 42 | 39 | 7 |
| % Passing First College-level Course | 65 | 57 | -- |
| Elementary Algebra: | | | |
| # Returned Spring 1985 (%) | 86 (42) | 378 (71) | 389 (33) |
| % GPA Greater Than/Equal to 2.0 | 78 | 80 | 68 |
| % Successful Survival | 33 | 57 | 22 |
| % Passing First College-level Course | 87 | 59 | -- |

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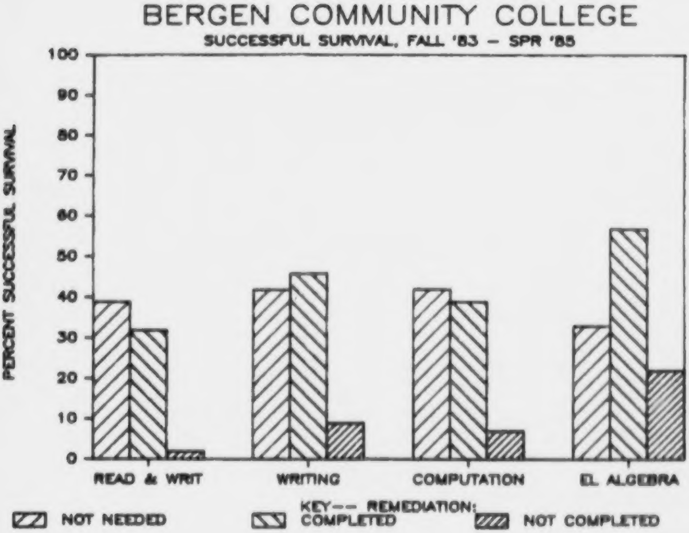
*Course integrates reading and writing.

**Placement for students testing in the range 161-164 (inclusive); if below 161, placed into "reading."



REMEDIAL PROGRAM REMARKS

Bergen identifies and enrolls large numbers of students in its remedial programs (667 in reading, 897 in algebra for example). Consequently, it is impressive that students who have completed remediation in all four areas have significantly higher retention rates than students who have not completed remediation and even higher retention rates than students who needed no remediation. In contrast, retention and successful survival rates for remediation-incomplete students are very low (2 to 22%).

In areas of reading and writing, the performance in the first college-level course by students who completed remediation is also close to the performance of students who needed no remediation. However, students completing algebra remediation present a more complex picture. Their reported performance in subsequent mathematics courses (59% passing) is much lower than non-remedial students (87% passing). This suggests that the percentage of students reaching minimum competence upon exit from algebra remediation may not be adequate. Since the college provided no post-test data and no narrative explanation of its program, further interpretation is not possible. A further complication, as seen from the graph, is that remediation-completed students in algebra have higher successful survival rates than non-remedial students (although there were only 86 such students who returned for the fourth semester).

## BROOKDALE COMMUNITY COLLEGE

### 1983 FULL-TIME COHORT

Students Tested: 1212 94 %

### Placement Criteria

Reading: NJCBSPT RC 163
Writing: NJCBSPT SS 161
Computation: NJCBSPT MC 166
El. Algebra: NJCBSPT EA 171

### Course Placement, Enrollment and Outcomes

| | Reading | Writing | Computation | El. Algebra |
|---|---|---|---|---|
| % Identified | 36 | 27 | 44 | 66 |
| % Enrolled | 85 | 92 | 77 | 51 |
| % Passing Final Remedial Course | 75 | 80 | 69 | 62 |
| % Reaching Minimum Competency | N/A | N/A | N/A | N/A |

### Cumulative Four-semester Follow Up

| | Remediation Not Needed | Remediation Completed | Remediation Not Completed |
|---|---|---|---|
| Reading: | | | |
| # Returned Spring 1985 (%) | 339 (49) | 134 (48) | 40 (26) |
| % GPA Greater Than/Equal to 2.0[1] | -- | -- | -- |
| % Successful Survival | 49 | 48 | 26 |
| % Passing First College-level Course | 83 | 84 | -- |
| Writing: | | | |
| # Returned Spring 1985 (%) | 407 (50) | 106 (44) | 11 (13) |
| % GPA Greater Than/Equal to 2.0[1] | -- | -- | -- |
| % Successful Survival | 50 | 44 | 13 |
| % Passing First College-level Course | 84 | 77 | -- |
| Computation: | | | |
| # Returned Spring 1985 (%) | 293 (51) | 159 (63) | 55 (19) |
| % GPA Greater Than/Equal to 2.0[1] | -- | -- | -- |
| % Successful Survival | 51 | 63 | 19 |
| % Passing First College-level Course | 65 | 34 | -- |
| Elementary Algebra: | | | |
| # Returned Spring 1985 (%) | 164 (56) | 174 (69) | 170 (31) |
| % GPA Greater Than/Equal to 2.0[1] | -- | -- | -- |
| % Successful Survival | 56 | 69 | 31 |
| % Passing First College-level Course | 62 | 57 | -- |

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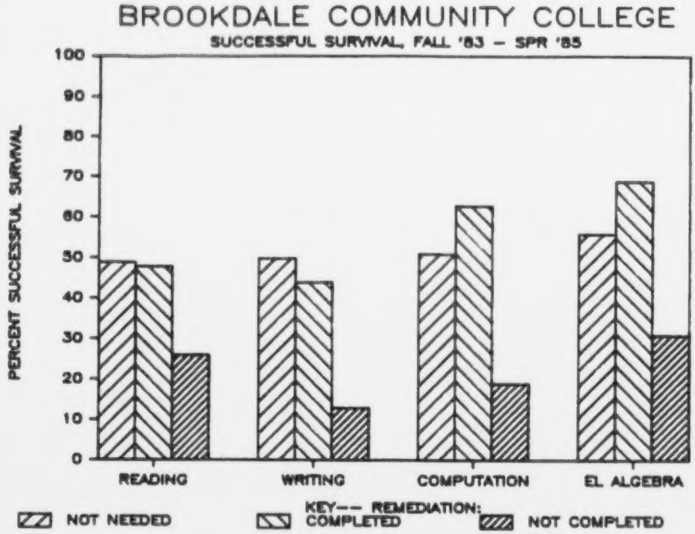
[1] Institution's unique grading system (2.0-4.0) does not allow for meaningful GPA comparisons with other colleges.



BROOKDALE COMMUNITY COLLEGE

SUCCESSFUL SURVIVAL, FALL '83 – SPR '85

## REMEDIAL PROGRAM REMARKS

Brookdale's GPA data are unusual because the institution's "non-punitive" grading system results in every student having a GPA of 2.0 or better. Brookdale does not give a grade of D, and instead of F a "no credit" is given. This also results in the successful survival rate calculation not having the same meaning as in other colleges. Successful survivors were reported as all those who returned in Spring 1985 (same as the retention rate).

However, it should be noted that Brookdale employs a system of student accountability that looks at student performance on the basis of credits attempted versus credits earned, both for each semester and cumulatively. Students whose ratios fall below acceptable levels, while offered additional support services, are placed on academic warning, academic limitation, and are finally dismissed if they do not achieve acceptable ratios. Also, because Brookdale does not offer a grade of D, students who may have passed with a D at other institutions may not have been able to pass courses at Brookdale.

Overall, retention rates are very much like those of other county colleges and in terms of the earned-credits ratio, remediation-completed students appear to fare as well as non-remedial students. Retention rates for students who completed remediation were significantly higher than for students who did not complete remediation in all four areas and close to or higher than the retention rates for students who did not need remediation (except in writing). Students who complete needed computation remediation have a significantly greater survival rate than those who did not need remediation.

## BROOKDALE COMMUNITY COLLEGE

## REMEDIAL PROGRAM REMARKS, CONTINUED

The college employs the "mastery learning" concept in all remedial courses but did not report post-test data. With the exception of the area of computation, the performance in the first college-level courses for students who completed remediation was close to the performance of students who did not require remediation.

## BURLINGTON COUNTY COLLEGE

1983 FULL-TIME COHORT

Students Tested: 646 96 %

### Placement Criteria

Reading: NJCBSPT RC 167
Writing: NJCBSPT SS 162 or SS 173 & Essay judged remedial by faculty
Computation: NJCBSPT MC 168
El. Algebra: NJCBSPT EA 167

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### Course Placement, Enrollment and Outcomes

| | Reading | Writing | Computation | El. Algebra |
|---|---|---|---|---|
| % Identified | 59 | 63 | 60 | 60[1] |
| % Enrolled | 86 | 94 | 62 | 38 |
| % Passing Final Remedial Course | 78 | 80 | 81 | 74 |
| % Reaching Minimum Competency | 74 | 82 | 50 | 100 |

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### Cumulative Four-semester Follow Up

| | Remediation Not Needed | Remediation Completed | Remediation Not Completed |
|---|---|---|---|
| **Reading:** | | | |
| # Returned Spring 1985 (%) | 114 (44) | 104 (54) | 70 (36) |
| % GPA Greater Than/Equal to 2.0 | 99 | 64 | 50 |
| % Successful Survival | 43 | 35 | 18 |
| % Passing First College-level Course | 73 | 74 | -- |
| **Writing:** | | | |
| # Returned Spring 1985 (%) | 109 (45) | 163 (53) | 16 (16) |
| % GPA Greater Than/Equal to 2.0 | 77 | 61 | 25 |
| % Successful Survival | 35 | 32 | 4 |
| % Passing First College-level Course | 85 | 84 | -- |
| **Computation:** | | | |
| # Returned Spring 1985 (%) | 134 (52) | 102 (52) | 52 (27) |
| % GPA Greater Than/Equal to 2.0 | 73 | 56 | 62 |
| % Successful Survival | 38 | 29 | 16 |
| % Passing First College-level Course | 74 | 30 | -- |
| **Elementary Algebra:** | | | |
| # Returned Spring 1985 (%) | 89 (54) | 68 (63) | 89 (32) |
| % GPA Greater Than/Equal to 2.0 | 74 | 57 | 61 |
| % Successful Survival | 40 | 36 | 19 |
| % Passing First College-level Course | 80 | 67 | -- |

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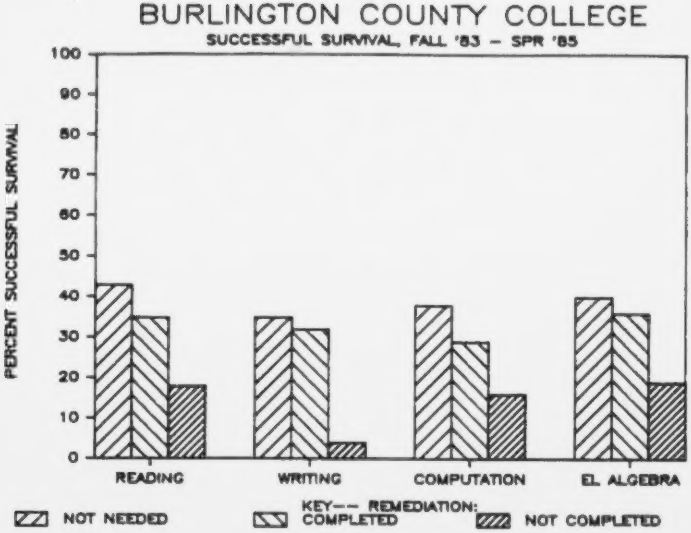
[1] Includes only students that are in curricula that require algebra.



REMEDIAL PROGRAM REMARKS

Burlington reported that they tested more part-time students than were required to be tested. For this report they tracked 646 full-time and 241 part-time students.

The passing rates reported for the final level of remedial courses for full-time students ranged from a high of 81 percent in computation to a low of 74 percent in algebra. As with most colleges, in all four areas the percent retained after two years was much higher for the group of students who did not need remediation as well as for the group who needed remediation and completed it, than for the students who needed remediation but did not complete it. However, the retention rates for students not completing remediation in reading and computation appear higher than those observed in other county colleges.

The mean GPA for the group not needing remediation was higher than the mean for the group needing remediation and completing it. In turn, the mean for those completing remediation was higher than the mean GPA for those not completing remediation. The pre-/post-test data reported indicates that Burlington has a comprehensive pre-test and post-test program and that the percentage of students reaching minimum competency is satisfactery in the verbal areas, and much improved in computation compared with last year's report (100% reached minimum competency vs. 60% last year). However, the remediation-completed group in mathematics had much lower passing rates in the college level mathematics course than those not needing remediation.

## BURLINGTON COUNTY COLLEGE

### REMEDIAL PROGRAM REMARKS, CONTINUED

The high retention rates and GPA's for students needing remediation in algebra and not completing it, compared with those completing remediation, should be topics for institutional research at the college.

# CAMDEN COUNTY COLLEGE

## 1983 FULL-TIME COHORT

Students Tested: 1156 96 %

### Placement Criteria

Reading: NJCBSPT RC 166
Writing: NJCBSPT Composition 166
Computation: NJCBSPT MC 165
El. Algebra: NJCBSPT EA 175

### Course Placement, Enrollment and Outcomes

| | Reading | Writing | Computation | El. Algebra |
|---|---|---|---|---|
| % Identified | 51 | 60 | 46 | 54 |
| % Enrolled | 79 | 82 | 95 | 107* |
| % Passing Final Remedial Course | 67 | 64 | 59 | 61 |
| % Reaching Minimum Competency | 34 | N/A | 100 | N/A |

### Cumulative Four-semester Follow Up

| | Remediation Not Needed | Remediation Completed | Remediation Not Completed |
|---|---|---|---|
| Reading: | | | |
| # Returned Spring 1985 (%) | 388 (42) | 160 (55) | 67 (18) |
| % GPA Greater Than/Equal to 2.0 | 94 | 74 | 75 |
| % Successful Survival | 39 | 40 | 14 |
| % Passing First College-level Course[1] | 74 | 66 | -- |
| Writing: | | | |
| # Returned Spring 1985 (%) | 330 (40) | 225 (62) | 63 (14) |
| % GPA Greater Than/Equal to 2.0 | 96 | 78 | 73 |
| % Successful Survival | 38 | 48 | 10 |
| % Passing First College-level Course[1] | 76 | 67 | -- |
| Computation: | | | |
| # Returned Spring 1985 (%) | 400 (46) | 153 (55) | 51 (12) |
| % GPA Greater Than/Equal to 2.0 | 91 | 80 | 63 |
| % Successful Survival | 42 | 44 | 7 |
| % Passing First College-level Course[1] | 69 | 56 | -- |
| Elementary Algebra: | | | |
| # Returned Spring 1985 (%) | 210 (30) | 237 (66) | 152 (21) |
| % GPA Greater Than/Equal to 2.0 | 95 | 85 | 74 |
| % Successful Survival | 28 | 60 | 16 |
| % Passing First College-level Course[1] | 70 | 66 | -- |

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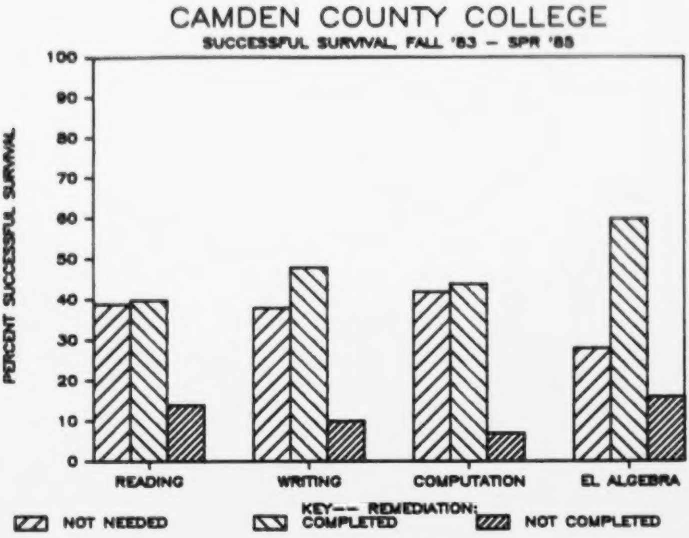
*College requests footnote stating that a considerable amount of the data compilation was done manually and therefore inexplicable errors may exist.

[1] First attempt at course only (explicit).



## REMEDIAL PROGRAM REMARKS

Camden reported that they tested a large number of students (1156 Full-time and 521 Part-time). As with most colleges, in all four areas the percent retained after two years was much higher for the group of students who did not need remediation as well as for the group who needed remediation and completed it, than for the students who needed remediation but did not complete it. The successful survival rates followed the same pattern. However, 14 to 21 percent of students who needed remediation in any of the four areas but did not complete it, appear to have grade point averages that are above a "C" and only slightly lower than those who completed remediation.

Successful survival rates were higher among students who completed remediation in computation and algebra than those who completed remediation in verbal areas. The college did not report complete pre-test/post-test data because it uses local exit-essay exams in writing which seem to equate passing with minimum competence.

## COUNTY COLLEGE OF MORRIS

### 1983 FULL-TIME COHORT

Students Tested: 1680[1] 94 %

### Placement Criteria

Reading: NJCBSPT RC 166
Writing: NJCBSPT Composition 165; C grade in high school English; SAT-V 350
Computation: NJCBSPT MC 165; C grade in high school math; SAT-M 350
El. Algebra: NJCBSPT EA 172; C grade in high school algebra/geometry; SAT-M 400

### Course Placement, Enrollment and Outcomes

| | Reading | Writing | Computation | El. Algebra |
|---|---|---|---|---|
| % Identified | 24 | 24 | 16 | 12 |
| % Enrolled | 82 | 98 | 93 | 95 |
| % Passing Final Remedial Course | 78 | 75 | 57 | 38 |
| % Reaching Minimum Competency | N/A | N/A | N/A | N/A |

### Cumulative Four-semester Follow Up

| | Remediation Not Needed | Remediation Completed | Remediation Not Completed |
|---|---|---|---|
| Reading: | | | |
| # Returned Spring 1985 (%) | 821 (64) | 166 (64) | 19 (13) |
| % GPA Greater Than/Equal to 2.0 | 76 | 55 | 21 |
| % Successful Survival | 49 | 35 | 3 |
| % Passing First College-level Course | 88 | 91 | -- |
| Writing: | | | |
| # Returned Spring 1985 (%) | 814 (63) | 168 (58) | 24 (22) |
| % GPA Greater Than/Equal to 2.0 | 76 | 55 | 17 |
| % Successful Survival | 48 | 32 | 4 |
| % Passing First College-level Course | 89 | 84 | -- |
| Computation: | | | |
| # Returned Spring 1985 (%) | 884 (63) | 91 (63) | 31 (24) |
| % GPA Greater Than/Equal to 2.0 | 74 | 64 | 23 |
| % Successful Survival | 46 | 40 | 6 |
| % Passing First College-level Course | 75 | 100 | -- |
| Elementary Algebra: | | | |
| # Returned Spring 1985 (%) | 895 (60) | 49 (69) | 62 (50) |
| % GPA Greater Than/Equal to 2.0 | 73 | 69 | 55 |
| % Successful Survival | 44 | 48 | 28 |
| % Passing First College-level Course | 74 | 93 | -- |

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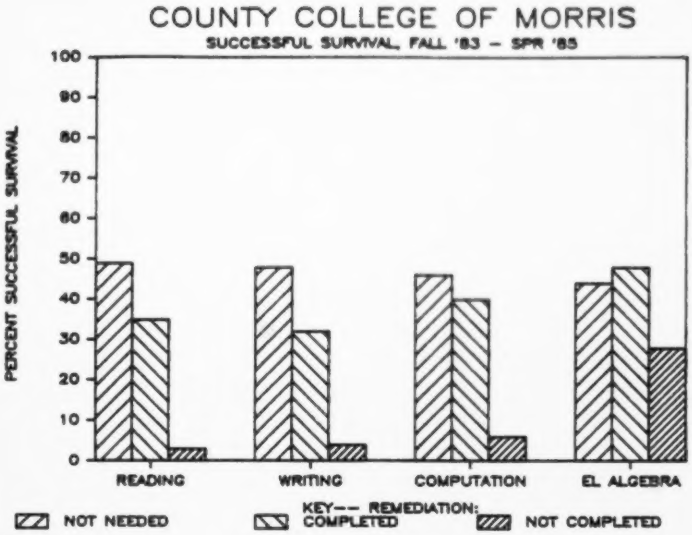
[1] However, institution reports that only 1576 of these took the algebra portion of test.



REMEDIAL PROGRAM REMARKS

One of the larger county colleges, County College of Morris displays both high retention rates (for both non-remedial and remedial students) and a relatively low percentage of its student body identified as needing remediation (24% in reading, for example, vs. 41% as the sector average).

Over all skill areas, the remediation-completed group attained significantly higher rates of retention, credit ratios, percentages of GPA's above 2.0 and successful survival rates as compared to the remediaton-not-completed group. Retention rates for the remediation-completed group were actually higher than the remediation-not-needed group in the areas of computation and elementary algebra.

Significant percentages (75 to 78%) of Morris' students pass their reading and writing remedial courses. In mathematics the percentages passing appear low (38 to 57%) but are misleading because of the college's use of an "in progress" grade for 40 to 56 percent of these students. Most significant is the comparison of passing rates in subsequent college-level courses where Morris' remediation-completed students often out-perform their non-remedial peers. The college did not report pre- and post-testing data, detracting from the otherwise fine outcome data reported.

## CUMBERLAND COUNTY COLLEGE

### 1983 FULL-TIME COHORT

Students Tested: 304 100 %

### Placement Criteria

**Reading:** NJCBSPT RC 165
**Writing:** NJCBSPT SS 165
**Computation:** NJCBSPT MC 165
El. Algebra: NJCBSPT EA 175

---

### Course Placement, Enrollment and Outcomes

| | Reading | Writing | Computation | El. Algebra |
|---|---|---|---|---|
| % Identified | 46 | 53 | 42 | 68[1] |
| % Enrolled | 86 | 91 | 88 | 59[1] |
| % Passing Final Remedial Course | 73 | 87 | 65 | 77 |
| % Reaching Minimum Competency | 91 | 71 | 100 | 92 |

---

### Cumulative Four-semester Follow Up

| | Remediation Not Needed | Remediation Completed | Remediation Not Completed |
|---|---|---|---|
| Reading: | | | |
| # Returned Spring 1985 (%) | 80 (48) | 37 (45) | 7 (18) |
| % GPA Greater Than/Equal to 2.0 | 91 | 70 | 86 |
| % Successful Survival | 44 | 31 | 15 |
| % Passing First College-level Course | 83 | 80 | -- |
| Writing: | | | |
| # Returned Spring 1985 (%) | 71 (49) | 52 (43) | 1 (9) |
| % GPA Greater Than/Equal to 2.0 | 93 | 75 | N/A |
| % Successful Survival | 46 | 32 | N/A |
| % Passing First College-level Course | 84 | 79 | -- |
| Computation: | | | |
| # Returned Spring 1985 (%) | 87 (50) | 30 (41) | 9 (22) |
| % GPA Greater Than/Equal to 2.0 | 91 | 77 | 56 |
| % Successful Survival | 45 | 31 | 12 |
| % Passing First College-level Course | 71 | 53 | -- |
| Elementary Algebra: | | | |
| # Returned Spring 1985 (%) | 59 (61) | 26 (49) | 7 (54) |
| % GPA Greater Than/Equal to 2.0 | 91 | 85 | 100 |
| % Successful Survival | 56 | 41 | 54 |
| % Passing First College-level Course | 71 | 54 | -- |

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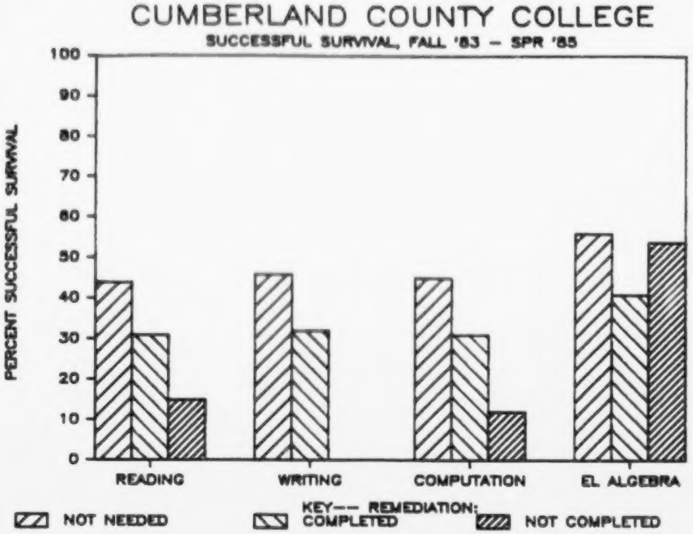
[1] Includes students carried over from computation, since students identified as needing remediation in computation are required to take algebra.



## REMEDIAL PROGRAM REMARKS

Cumberland reported much higher retention rates for the non-remedial and remediation-completed groups than for the group needing remediation but not completing it in the areas of reading, writing, and computation, but not in elementary algebra. It should be noted that the number of non-completing students who were retained after two years was small (not larger than 9 in any area). It appears that these students did almost as well as those who did not need remediation and those who needed remediation and completed it in terms of mean credits earned and mean GPA. The percentage bars in the graph should be interpreted with caution because of the small numbers of students involved.

Following a similar pattern, with the exception of elementary algebra the successful survival rates for the groups not needing remediation and needing remediation and completing it was higher than that of the group needing remediation but not completing it. However, students who completed remediation in reading and writing had lower GPA's than those not needing remediation in these areas. In contrast, the remediation-completed group in computation and algebra had higher GPA's than the non-remedial students.

It can also be noted that Cumberland appears to have a comprehensive pre- and post-testing program. The percentage of students who attained minimum competency level ranged from 67 percent in reading to 100 percent in computation. The passing rates of remediation-completed students in first college courses were close to those of non-remedial students for reading/writing but lower in mathematics.

## ESSEX COUNTY COLLEGE

### 1983 FULL-TIME COHORT

Students Tested: 706 99 %

### Placement Criteria

Reading: NJCBSPT RC 161
Writing: NJCBSPT SS 153, Essay 9
Computation: NJCBSPT MC 169
El. Algebra: NJCBSPT EA 168

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### Course Placement, Enrollment and Outcomes

| | Reading | Writing | Computation | El. Algebra |
|---|---|---|---|---|
| % Identified | 79 | 73 | 89 | 92[1] |
| % Enrolled | 90 | 87 | 88 | 49[1] |
| % Passing Final Remedial Course | 69 | 59 | 55 | 51 |
| % Reaching Minimum Competency | 34 | 41 | 77 | 55 |

### Cumulative Four-semester Follow Up

| | Remediation Not Needed | Remediation Completed | Remediation Not Completed |
|---|---|---|---|
| Reading: | | | |
| # Returned Spring 1985 (%) | 34 (23) | 39 (48) | 133 (28) |
| % GPA Greater Than/Equal to 2.0 | 91 | 56 | 69 |
| % Successful Survival | 21 | 24 | 19 |
| % Passing First College-level Course | 64 | 65 | -- |
| Writing: | | | |
| # Returned Spring 1985 (%) | 30 (15) | 93 (45) | 61 (20) |
| % GPA Greater Than/Equal to 2.0 | 93 | 68 | 59 |
| % Successful Survival | 14 | 31 | 12 |
| % Passing First College-level Course | 64 | 64 | -- |
| Computation: | | | |
| # Returned Spring 1985 (%) | 34 (44) | 75 (43) | 98 (22) |
| % GPA Greater Than/Equal to 2.0 | 79 | 67 | 69 |
| % Successful Survival | 35 | 28 | 15 |
| % Passing First College-level Course | 72 | 67 | -- |
| Elementary Algebra: | | | |
| # Returned Spring 1985 (%) | 22 (45) | 78 (49) | 96 (19) |
| % GPA Greater Than/Equal to 2.0 | 86 | 73 | 64 |
| % Successful Survival | 39 | 36 | 12 |
| % Passing First College-level Course | 89 | 51 | -- |

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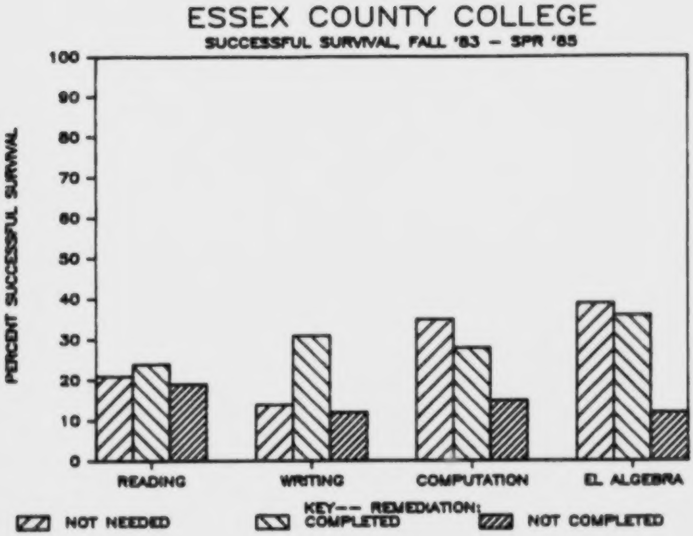
[1] Includes students carried over from computation, since those identified as needing remediation in computation are required to take algebra.



## REMEDIAL PROGRAM REMARKS

The percentage of students requiring remediation at Essex County College is very high, considerably higher than the sector average. The range is from 73 percent needing remediation in writing to 92 percent in algebra. Therefore, it is most important to compare the performance of those completing remediation with those who have not yet completed it.

Four-semester retention and successful survival rates for non-remedial students at Essex are well below those of other two-year institutions. Early transfer to four-year schools by non-remedial students is one explanation for this pattern (note the low percentage of non-remedial successful survivors in writing on the graph).

Retention rates for students who have completed remediation are much higher than for those who have not completed remediation, in all four disciplines. They are even higher than for those who did not need remediation in three of the disciplines and equal in the fourth, computation.

Passing rates for students in remedial courses are lower (51 to 69%) than in other colleges. Post-testing data also indicate that in many of the reading and writing courses less than half of the students who did pass reached minimum competence. The college reports using multiple criteria to assess minimum competence for exit from remediation. Nevertheless, it should be concerned about such post-test results.

## ESSEX COUNTY COLLEGE

### REMEDIAL PROGRAM REMARKS, CONTINUED

Performance on GPA's is not so clear cut. In writing and algebra, remediated students perform better than those who did not complete remediation but the opposite is true for reading and computation. However, when using successful survival rate as the criterion, all disciplines follow the expected pattern with remediation-completed students showing twice the successful survival rate of non-completers.

## GLOUCESTER COUNTY COLLEGE

### 1983 FULL-TIME COHORT

Students Tested: 611 99 %

### Placement Criteria

Reading: NJCBSPT Total English 162
Writing: NJCBSPT Total English 162
Computation: NJCBSPT MC 165
El. Algebra: (Algebra data not available[1])

---

### Course Placement, Enrollment and Outcomes

| | Reading | Writing | Computation | El. Algebra |
|---|---|---|---|---|
| % Identified | 18 | 37 | 44 | |
| % Enrolled | 97 | 98 | 94 | |
| % Passing Final Remedial Course | 76 | 74 | 69 | |
| % Reaching Minimum Competency | N/A | 84 | 67 | |

---

### Cumulative Four-semester Follow Up

| | Remediation Not Needed | Remediation Completed | Remediation Not Completed |
|---|---|---|---|
| **Reading:** | | | |
| # Returned Spring 1985 (%) | 250 (50) | 42 (57) | 6 (18) |
| % GPA Greater Than/Equal to 2.0 | 80 | 33 | 0 |
| % Successful Survival | 40 | 19 | 0 |
| % Passing First College-level Course | 76 | 75 | -- |
| **Writing:** | | | |
| # Returned Spring 1985 (%) | 201 (51) | 88 (57) | 9 (14) |
| % GPA Greater Than/Equal to 2.0 | 87 | 43 | 0 |
| % Successful Survival | 44 | 25 | 0 |
| % Passing First College-level Course | 78 | 72 | -- |
| **Computation:** | | | |
| # Returned Spring 1985 (%) | 169 (49) | 118 (68) | 11 (12) |
| % GPA Greater Than/Equal to 2.0 | 82 | 59 | 27 |
| % Successful Survival | 40 | 41 | 3 |
| % Passing First College-level Course | 72 | 65 | -- |
| **Elementary Algebra:** | | | |
| # Returned Spring 1985 (%) | | | |
| % GPA Greater Than/Equal to 2.0 | | | |
| % Successful Survival | | | |
| % Passing First College-level Course | | | |

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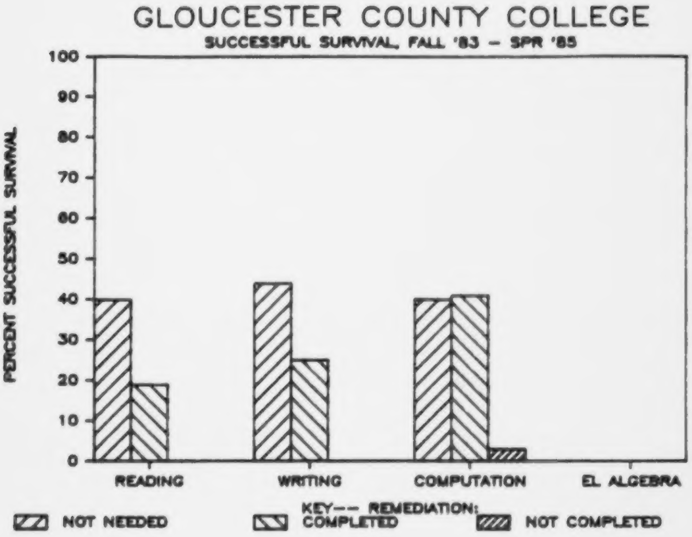
[1] Courses are offered in elementary and intermediate algebra; however, institution was unable to provide algebra data.



REMEDIAL PROGRAM REMARKS

The performance of students who have completed remediation is much higher than for those who have not completed remediation. This is evident in all four disciplines and on all criterion measures. Retention rates for completers are even higher than for those who needed no remediation. However, successful survival rates for remediation-completed students in reading (19%) are only half those of other community colleges while those in computation (40.5%) are slightly above the average. The college's pre-/post-testing means in reading suggest that a large percentage of students exiting remediation may not be reaching minimum competence. Equating the college's test instrument with the NJCBSPT may help resolve this issue. Paradoxically, students completing reading remediation have a high probability of passing the first level English Composition course (75%). A transcript analysis of this group of students may be necessary to determine why their mean GPA was only 1.72.

The importance of remediation in the basic English skills is further demonstrated by the failing grade point average of all students who did not complete their remediation. Less than 20 percent of them remain in college and none have achieved a GPA of 2.0 or better.

Although the college offers both elementary and intermediate algebra courses, computer support for placement in elementary algebra is not available. Thus, no data was reported on remediation in this area.

## HUDSON COUNTY COMMUNITY COLLEGE

### 1983 FULL-TIME COHORT

Students Tested: 499[1] 100%

### Placement Criteria

| | |
|---|---|
| Reading: | NJCBSPT RC 165 |
| Writing: | NJCBSPT SS 161 |
| Computation: | NJCBSPT MC 168 |
| El. Algebra: | NJCBSPT EA 167 |

### Course Placement, Enrollment and Outcomes

| | Reading | Writing | Computation | El. Algebra |
|---|---|---|---|---|
| % Identified | 71 | 67 | 86 | 39[1] |
| % Enrolled | 99 | 100 | 82 | 39[2] |
| % Passing Final Remedial Course | 67 | 68 | 56 | 67 |
| % Reaching Minimum Competency | 36 | 55 | 52 | 58 |

### Cumulative Four-semester Follow Up

| | Remediation Not Needed | Remediation Completed | Remediation Not Completed |
|---|---|---|---|
| Reading[3]: | | | |
| # Returned Spring 1985 (%) | 48 (36) | 72 (62) | -- |
| % GPA Greater Than/Equal to 2.0 | 83 | 53 | -- |
| % Successful Survival | 30 | 25 | -- |
| % Passing First College-level Course | 67 | 59 | -- |
| Writing: | | | |
| # Returned Spring 1985 (%) | 49 (35) | 56 (56) | 15 (7) |
| % GPA Greater Than/Equal to 2.0 | 86 | 41 | 87 |
| % Successful Survival | 30 | 23 | 2 |
| % Passing First College-level Course | 67 | 60 | -- |
| Computation: | | | |
| # Returned Spring 1985 (%) | 44 (35) | 37 (47) | 39 (16) |
| % GPA Greater Than/Equal to 2.0 | 82 | 54 | 56 |
| % Successful Survival | 29 | 23 | 6 |
| % Passing First College-level Course | 87 | 55 | -- |
| Elementary Algebra: | | | |
| # Returned Spring 1985 (%) | 15 (43) | 17 (44) | 35 (23) |
| % GPA Greater Than/Equal to 2.0 | 93 | 59 | 63 |
| % Successful Survival | 40 | 26 | 12 |
| % Passing First College-level Course | 92 | 63 | -- |

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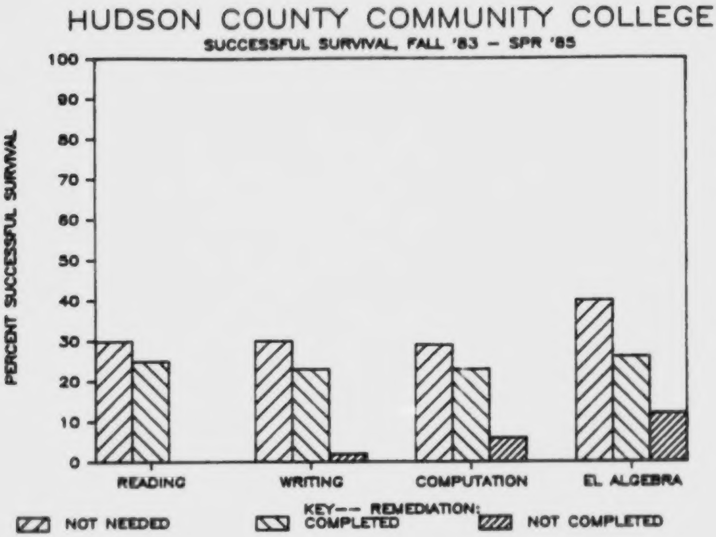
[1] However, algebra portion of test not required for students who have not taken an algebra course.

[2] Algebra remediation required only in certain curricula.

[3] Third study group ("not completed") not applicable, since students who fail to complete remediation are not permitted to take college-level courses.



REMEDIAL PROGRAM REMARKS

Hudson is an institution that contracts for the teaching of most of its college-level programs at other colleges. However, its remedial programs are handled in-house by its own faculty.

The percentage of students requiring remediation at Hudson County Community College is higher than the sector average. It ranges from 67 percent in writing to 86 percent in computation. Retention rates for both remedial and non-remedial students are considerably lower than in other community colleges.

Retention rates, however, for students who have completed remediation are much higher than for those who have not completed remediation, and are even higher than for those who did not need remediation. This is true in all four subject areas.

The performance on the other measures is not encouraging. The percentage of students who pass Hudson's final level of remediation is well below that found in other colleges. For example, only 56 percent of the 146 students enrolled in computation passed the course. Of those who pass their remedial courses, post-testing indicates that only 39 percent reach minimum competence in reading and 45 percent in computation. When these students go on to college-level courses, they have just over a 50 percent chance of passing them. The grade point averages of these remediation-completed students averaged just below a "C" for the reading/writing-remediated and just above "C" for the mathematics-remediated students.

## HUDSON COUNTY COMMUNITY COLLEGE

### REMEDIAL PROGRAM REMARKS, CONTINUED

While Hudson County Community College has developed multi-tiered remedial courses and carefully tracked its students, the overall performance of the program as judged by outcome measures leaves much to be improved.

## MERCER COUNTY COMMUNITY COLLEGE

### 1983 FULL-TIME COHORT

Students Tested: 1584 99 %

### Placement Criteria

Reading: NJCBSPT RC 162
Writing: NJCBSPT SS 165, Essay 8
Computation: NJCBSPT MC 165
El. Algebra: NJCBSPT EA 166

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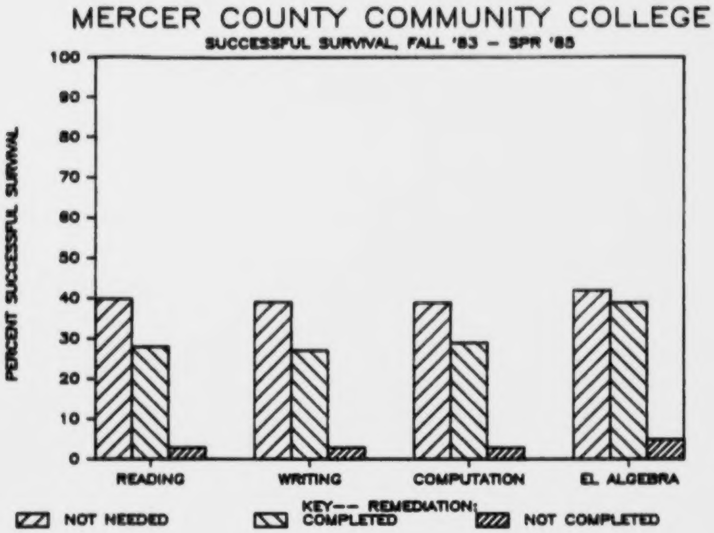
### Course Placement, Enrollment and Outcomes

| | Reading | Writing | Computation | El. Algebra |
|---|---|---|---|---|
| % Identified | 44 | 43 | 42 | 56 |
| % Enrolled | 96 | 96 | 93 | 72 |
| % Passing Final Remedial Course | 82 | 83 | 72 | 73 |
| % Reaching Minimum Competency | 100 | 100 | 100 | 100 |

---

### Cumulative Four-semester Follow Up

| | Remediation Not Needed | Remediation Completed | Remediation Not Completed |
|---|---|---|---|
| Reading: | | | |
| # Returned Spring 1985 (%) | 477 (53) | 267 (54) | 22 (12) |
| % GPA Greater Than/Equal to 2.0 | 75 | 52 | 27 |
| % Successful Survival | 40 | 28 | 3 |
| % Passing First College-level Course | 87 | 82 | -- |
| Writing: | | | |
| # Returned Spring 1985 (%) | 474 (53) | 279 (52) | 15 (10) |
| % GPA Greater Than/Equal to 2.0 | 74 | 52 | 27 |
| % Successful Survival | 39 | 27 | 3 |
| % Passing First College-level Course | 88 | 77 | -- |
| Computation: | | | |
| # Returned Spring 1985 (%) | 507 (55) | 241 (54) | 17 (8) |
| % GPA Greater Than/Equal to 2.0 | 71 | 54 | 35 |
| % Successful Survival | 39 | 29 | 3 |
| % Passing First College-level Course | 73 | 63 | -- |
| Elementary Algebra: | | | |
| # Returned Spring 1985 (%) | 395 (57) | 296 (61) | 74 (18) |
| % GPA Greater Than/Equal to 2.0 | 73 | 63 | 27 |
| % Successful Survival | 42 | 39 | 5 |
| % Passing First College-level Course | 83 | 66 | -- |



MERCER COUNTY COMMUNITY COLLEGE

SUCCESSFUL SURVIVAL, FALL '83 – SPR '85

REMEDIAL PROGRAM REMARKS

Mercer's percentage of students tested and percentage enrolled in needed remedial courses are both over 95 percent with the exception of enrollment in remedial algebra. Over 80 percent of the students in remedial reading or writing pass their courses and over 70 percent pass remedial mathematics courses.

Non-remedial students and students who complete remediation at Mercer have virtually the same retention rates. More than half of both these groups from Fall 1983 were enrolled in Spring 1985. In contrast, approximately 10 percent of the unremediated students from Fall 1983 returned in the Spring 1985.

Students who exited remediation in reading and writing passed their subsequent college level writing course at rates comparable to non-remedial students. Students completing remediation in algebra, however, did not pass their next mathematics course at the same rates (66 vs. 83%) as non-remedial students. The college also reported an extensive, supplementary analysis of the passing rates of remediated vs. non-remedial students in 13 other college-level courses. Among these courses, five showed impressive performance by remediated students, while the comparison in eight others did not meet the college's expectations.

Pre- and post-testing data reported by the college are more extensive and complete than any other institution yet contain some seeming inconsistencies. While 100 percent of students who pass every remedial area are reported as attaining minimum competency, the mean post-test scores in elementary algebra are below the criterion the college uses for minimun competency. Data from the next (1984) cohort of students do not show this inconsistency. Further, in the reading area, there was some difficulty in equating the California test used for pre-testing with the initial placements of remedial students via the NJCBSPT.

Although the remediation-not-needed group evidenced the highest GPA's, credit ratios and successful survival rates, the remediation-completed group in general attained levels only slightly lower. Successful survival rates and credit ratios were lowest in the remediation-not-completed group. In fact, students who did not complete required remediation averaged only a five percent chance of successful survival at Mercer.

# MIDDLESEX COUNTY COLLEGE

## 1983 FULL-TIME COHORT

Students Tested: 2277 99 %

### Placement Criteria

| | |
|---|---|
| Reading: | NJCBSPT RC 162 |
| Writing: | NJCBSPT SS 162 |
| Computation: | NJCBSPT MC 166 |
| El. Algebra: | NJCBSPT EA 167 and curriculum requiring math |

### Course Placement, Enrollment and Outcomes

| | Reading | Writing | Computation | El. Algebra |
|---|---|---|---|---|
| % Identified | 36 | 31 | 48 | 11[1] |
| % Enrolled | 93 | 95 | 93 | 96 |
| % Passing Final Remedial Course | 77 | 69 | 69 | 84 |
| % Reaching Minimum Competency | 53 | 43 | 30 | 84 |

### Cumulative Four-semester Follow Up

| | Remediation Not Needed | Remediation Completed | Remediation Not Completed |
|---|---|---|---|
| **Reading:** | | | |
| # Returned Spring 1985 (%) | 772 (53) | 357 (58) | 15 (7) |
| % GPA Greater Than/Equal to 2.0 | 82 | 69 | 33 |
| % Successful Survival | 43 | 40 | 3 |
| % Passing First College-level Course | 78 | 75 | -- |
| **Writing:** | | | |
| # Returned Spring 1985 (%) | 829 (53) | 290 (60) | 25 (11) |
| % GPA Greater Than/Equal to 2.0 | 82 | 70 | 24 |
| % Successful Survival | 43 | 42 | 3 |
| % Passing First College-level Course | 79 | 73 | -- |
| **Computation:** | | | |
| # Returned Spring 1985 (%) | 654 (55) | 453 (61) | 37 (11) |
| % GPA Greater Than/Equal to 2.0 | 82 | 75 | 35 |
| % Successful Survival | 42 | 46 | 4 |
| % Passing First College-level Course | 75 | 59 | -- |
| **Elementary Algebra:** | | | |
| # Returned Spring 1985 (%) | 257 (62) | 83 (53) | 20 (22) |
| % GPA Greater Than/Equal to 2.0 | 77 | 66 | 60 |
| % Successful Survival | 48 | 32 | 13 |
| % Passing First College-level Course | 77 | 62 | -- |

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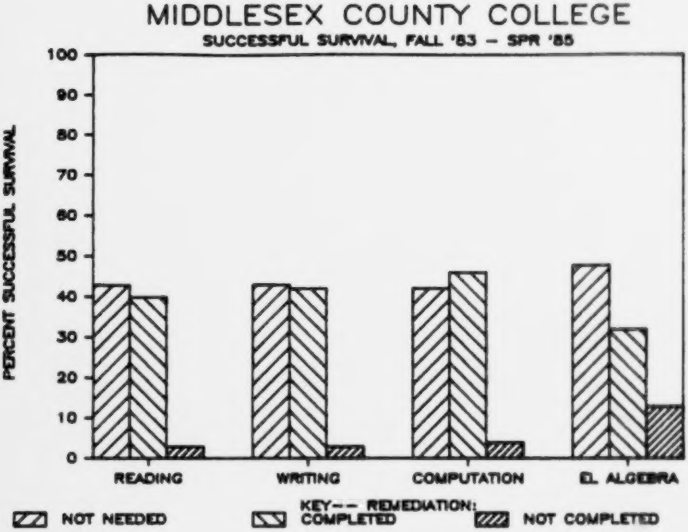
[1] Students are identified as needing algebra remediation only in certain programs.



REMEDIAL PROGRAM REMARKS

In all skill areas, the remediation-completed group achieved higher retention rates, higher percentage of GPA's exceeding 2.0, and higher successful survival rates than did the group who did not complete remediation.

Retention rates were higher for the remediation-completed group as compared with the remediation-not-needed group in each of the skill areas except elementary algebra, wherein the remediation-not-needed group rates were highest. Students who completed remediation also had successful survival rates similar to those who did not need remediation and approximately 20 times higher than those who did not complete remediation in either reading or writing.

Although the remediation-completed groups in reading, writing and computation had relatively small percentages of students achieving minimum competency, they performed at approximately the same levels as the remediation-not-needed group. The college reported that for the 1984 cohort post-testing will become a part of the final grading procedure in order to ensure high student motivation for post-testing.

## OCEAN COUNTY COLLEGE

### 1983 FULL-TIME COHORT

Students Tested: 1682 99 %

### Placement Criteria

Reading: NJCBSPT RC 161; in-house test
Writing: NJCBSPT Essay 9 & SS 145; Essay 7-8 & SS 150; Essay 6
Computation: NJCBSPT MC 161; in-house test
El. Algebra: NJCBSPT EA 161

### Course Placement, Enrollment and Outcomes

| | Reading | Writing | Computation | El. Algebra |
|---|---|---|---|---|
| % Identified[1] | 39 | 18 | 38 | 1 |
| % Enrolled | 72 | 87 | 73 | 38 |
| % Passing Final Remedial Course[2] | 73 | 79 | 69 | 60 |
| % Reaching Minimum Competency | N/A | N/A | N/A | N/A |

### Cumulative Four-semester Follow Up

| | Remediation Not Needed | Remediation Completed[2] | Remediation Not Completed |
|---|---|---|---|
| **Reading:** | | | |
| # Returned Spring 1985 (%) | 371 (60) | 141 (64) | 46 (27) |
| % GPA Greater Than/Equal to 2.0 | 88 | 67 | 57 |
| % Successful Survival | 53 | 43 | 15 |
| % Passing First College-level Course | N/A | N/A | -- |
| **Writing:** | | | |
| # Returned Spring 1985 (%) | 472 (57) | 77 (57) | 9 (19) |
| % GPA Greater Than/Equal to 2.0 | 85 | 55 | 44 |
| % Successful Survival | 48 | 31 | 9 |
| % Passing First College-level Course | N/A | N/A | -- |
| **Computation:** | | | |
| # Returned Spring 1985 (%) | 384 (61) | 131 (63) | 43 (24) |
| % GPA Greater Than/Equal to 2.0 | 85 | 69 | 67 |
| % Successful Survival | 52 | 43 | 16 |
| % Passing First College-level Course | N/A | N/A | -- |
| **Elementary Algebra:** | | | |
| # Returned Spring 1985 (%) | 151 (62) | 0 (0) | 2 (22) |
| % GPA Greater Than/Equal to 2.0 | 87 | -- | 50 |
| % Successful Survival | 49 | 0 | 11 |
| % Passing First College-level Course | N/A | -- | -- |

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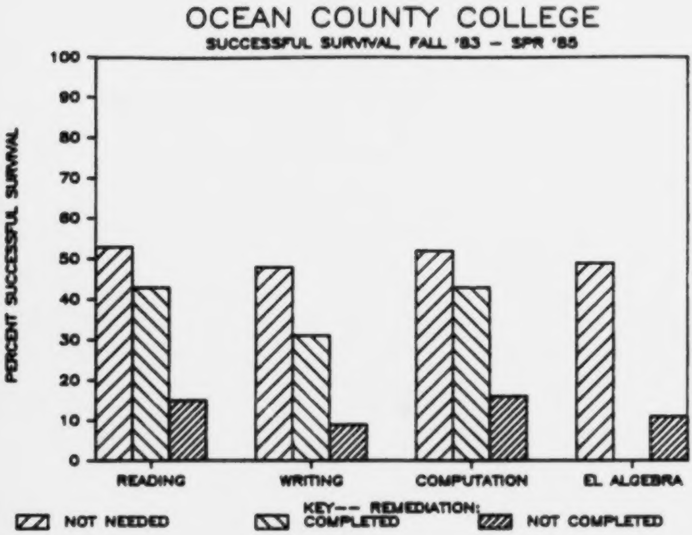
[1] Here based on number of tested and retained students (= 1014).

[2] Passing (and remediation completed) defined as grade of "C" or better, or "pass."



## REMEDIAL PROGRAM REMARKS

Ocean County College has a "block" style remedial program in which the most skills-deficient students take only remedial courses in their first semester. "Developmental" courses are offered as separate units for those students who are judged to be transitional between remedial and college-level work. The college's placement criteria in writing (a combination of the essay and sentence sense scores) appear to result in an unusually low percentage (18%) identified as needing remediation in writing. In addition, of the 1,682 students tested only 13 were identified for remediation in algebra because the college requires algebra only in a few majors. Of the 13 algebra-identified students, five enrolled in the assigned course, three passed but no one was retained in the fourth semester.

The passing rates in remedial courses were comparatively high but the college did not present data either on the percentage of remediation-completed students passing subsequent college-level courses or on post-testing at the end of remedial courses. The post-testing data presented by the college in last year's report were problematic. Of the 206 students who passed the remedial course in reading, post-test results were available for only 135 students. There is no indication of which post-test was used, but if the mean of 56.4 on the post-test was on the New Jersey Reading Comprehension test, it was very low. It is not surprising that only 36 percent of the students for whom the post-test results were available attained the minimum level on the post-test. In writing, although 42 out of 125 students who passed remedial courses took the post-test, the data reported were impossible to interpret.

## REMEDIAL PROGRAM REMARKS, CONTINUED

In terms of follow-up data, of the students who did not complete remediation, 27 percent in reading and 24 percent in mathematics were still enrolled in the fourth semester. And, in almost all skill areas, students who completed remediation had a much lower level of academic performance compared to those who did not need remediation.

Ocean County College repeatedly has had difficulty in adequately reporting the data asked of it by the Basic Skill Council. Adequate and fair analysis of its remedial program is obfuscated by inadequate and incomplete data reporting. It is entirely possible that on the pedagogical side their remedial program may be functioning well. Their placement policies in writing and algebra, as well as their data reporting, however, could benefit from review and revision.

# PASSAIC COUNTY COMMUNITY COLLEGE

## 1983 FULL-TIME COHORT

Students Tested: 347 93 %

### Placement Criteria

| | |
|---|---|
| Reading: | NJCBSPT RC 161 |
| Writing: | NJCBSPT SS 165, Essay 9 |
| Computation: | NJCBSPT MC 165 |
| El. Algebra: | NJCBSPT EA 176 |

### Course Placement, Enrollment and Outcomes

| | Reading | Writing | Computation | El. Algebra |
|---|---|---|---|---|
| % Identified | 82 | 89 | 95 | 3 |
| % Enrolled | 93 | 96 | 92 | 83 |
| % Passing Final Remedial Course[1] | 53 | 72 | 79 | 80 |
| % Reaching Minimum Competency | 53 | N/A | 36 | N/A |

### Cumulative Four-semester Follow Up

| | Remediation Not Needed | Remediation Completed | Remediation Not Completed |
|---|---|---|---|
| Reading: | | | |
| # Returned Spring 1985 (%) | 19 (30) | 47 (52) | 13 (7) |
| % GPA Greater Than/Equal to 2.0 | 74 | 38 | 23 |
| % Successful Survival | 22 | 20 | 2 |
| % Passing First College-level Course | 80 | 55 | -- |
| Writing: | | | |
| # Returned Spring 1985 (%) | 7 (22) | 53 (42) | 14 (8) |
| % GPA Greater Than/Equal to 2.0 | 71 | 47 | 21 |
| % Successful Survival | 16 | 20 | 2 |
| % Passing First College-level Course | 91 | 55 | -- |
| Computation: | | | |
| # Returned Spring 1985 (%) | 3 (75) | 58 (49) | 12 (11) |
| % GPA Greater Than/Equal to 2.0 | 67 | 40 | 46 |
| % Successful Survival | 50 | 19 | 5 |
| % Passing First College-level Course | 80 | 54 | -- |
| Elementary Algebra: | | | |
| # Returned Spring 1985 (%) | 0 (0) | 2 (25) | 3 (75) |
| % GPA Greater Than/Equal to 2.0 | -- | 100 | 67 |
| % Successful Survival | 0 | 25 | 50 |
| % Passing First College-level Course | -- | 100 | -- |

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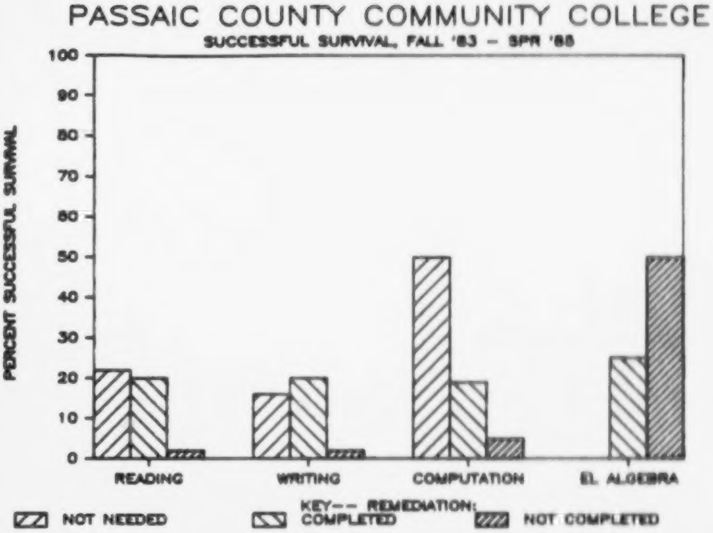
[1] Passing defined as grade of "C" or better.



REMEDIAL PROGRAM REMARKS

It goes to the credit of Passaic County College that despite the fact that an overwhelming majority (more than 95%) of students entering the college were skills-deficient in one or more areas, the college succeeded in testing most of them (92-93%), and in enrolling in remedial courses over 90 percent of those needing remediation.

Except for the passing rates for full-time students enrolled in remedial reading courses, the passing rates in remedial courses were high. However, the percentages of students passing remedial courses and attaining minimum competency on the post-test were very low: 36.4 percent in math; 52.9 percent in reading; and even lower in writing.

Although retention rates at Passaic are only about half of the county college sector average, students who completed remediation had a much higher retention rate than those who did not need remediation. For example, only 21.8 percent of those who did not need remediation in writing were enrolled in the fall semester compared to 42 percent of those who had completed remediation. It may be that students with an adequate level of skills are transferring to other institutions before graduation.

In terms of GPA and performance in subsequent courses, those who completed remediation performed at a much lower level than those who did not need remediation. It should be noted, however, that very few students at Passaic who did not need remediation persisted for four semesters (e.g., 7 in writing and 3 in computation). However, while successful survival rates of both the groups were low, the completers had slightly higher rates than those who did not need remediation, mainly because of a higher retention rate among the students who completed remediation.

It appears from the data that the remedial program at Passaic is struggling to produce even low successful survival rates. Students completing remediation have a low rate of reaching minimum level on the post-test, have low GPA's and low passing rates in subsequent courses. Passaic's thorough analysis of its data and remedial program performance clearly indicates that the institution is fully aware of its problems with the outcomes of the program.

# SALEM COMMUNITY COLLEGE

## 1983 FULL-TIME COHORT

Students Tested: 293 99 %

### Placement Criteria

| | |
|---|---|
| Reading: | NJCBSPT RC 159 |
| Writing: | NJCBSPT SS 161 |
| Computation: | NJCBSPT MC 161 |
| El. Algebra: | NJCBSPT EA 168; in-house test |

### Course Placement, Enrollment and Outcomes

| | Reading | Writing | Computation | El. Algebra |
|---|---|---|---|---|
| % Identified | 40 | 41 | 37 | 40[1] |
| % Enrolled | 77 | 90 | 88 | 74[1] |
| % Passing Final Remedial Course | 67 | 72 | 56 | 76 |
| % Reaching Minimum Competency | N/A | N/A | N/A | N/A |

### Cumulative Four-semester Follow Up

| | Remediation Not Needed | Remediation Completed | Remediation Not Completed |
|---|---|---|---|
| **Reading[2]:** | | | |
| # Returned Spring 1985 (%) | 84 (48) | 40 (65) | 39 (70) |
| % GPA Greater Than/Equal to 2.0 | 85 | 63 | 64 |
| % Successful Survival | 46 | 41 | 44 |
| % Passing First College-level Course | 83 | 89 | -- |
| **Writing:** | | | |
| # Returned Spring 1985 (%) | 87 (51) | 40 (59) | 7 (13) |
| % GPA Greater Than/Equal to 2.0 | 85 | 72 | 29 |
| % Successful Survival | 47 | 48 | 4 |
| % Passing First College-level Course | 80 | 95 | -- |
| **Computation:** | | | |
| # Returned Spring 1985 (%) | 92 (50) | 35 (57) | 7 (15) |
| % GPA Greater Than/Equal to 2.0 | 84 | 69 | 57 |
| % Successful Survival | 47 | 40 | 9 |
| % Passing First College-level Course | 89 | 90 | -- |
| **Elementary Algebra[3]:** | | | |
| # Returned Spring 1985 (%) | 70 (40) | 32 (62) | 3 (25) |
| % GPA Greater Than/Equal to 2.0 | 73 | 91 | 57 |
| % Successful Survival | 29 | 56 | 17 |
| % Passing First College-level Course | 90 | 86 | -- |

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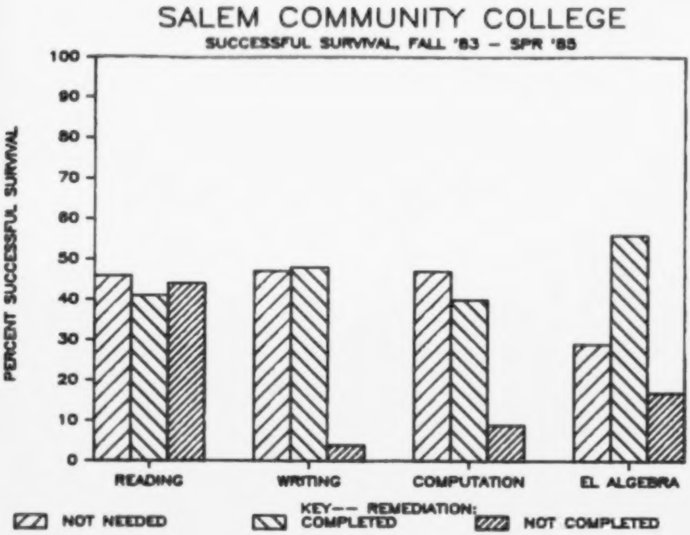
[1] Only a fraction of students included here were in programs that require algebra.

[2] At the time this cohort entered, students in some programs were not required to complete remediation in reading.

[3] Second study group ("completed") includes students who were not required to take remedial algebra but took it.



REMEDIAL PROGRAM REMARKS

Salem was able to test most of the students who needed to be tested, but its rate of enrolling remedial students in remedial courses was low for part-time students in general, and for full-time students needing remediation in reading and/or algebra (77% and 73%) in particular. Passing rates in remedial courses were reasonably high, but in the absence of post-test data, it was difficult to interpret those high passing rates.

Generally, completers had a higher retention rate than those not needing remediation; but, in reading, it is surprising to find that noncompleters had a very high rate of retention (69.6%), even higher than the rate for completers (64.5%). What is even more surprising, the 37 noncompleters in reading had a slightly higher term GPA (2.22) than completers (2.16), and higher successful survival rates (44%) than completers (41%). These findings need to be investigated by the college to find out what could be the probable reasons for these unexpected outcomes.

## SOMERSET COUNTY COLLEGE

### 1983 FULL-TIME COHORT

Students Tested: 808 99 %

### Placement Criteria

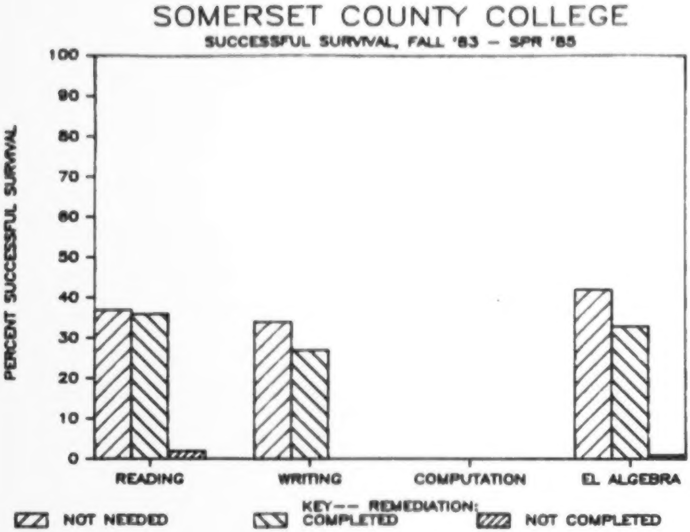
Reading: NJCBSPT RC 161
Writing: NJCBSPT SS 162
Computation: (No computation course until Spring '84)
El. Algebra: NJCBSPT EA 167

### Course Placement, Enrollment and Outcomes

| | Reading | Writing | Computation | El. Algebra |
|---|---|---|---|---|
| % Identified | 31 | 24 | | 46 |
| % Enrolled | 99 | 99 | | 100 |
| % Passing Final Remedial Course | 96 | 79 | | 64 |
| % Reaching Minimum Competency | 7 | 42 | | 89 |

### Cumulative Four-semester Follow Up

| | Remediation Not Needed | Remediation Completed | Remediation Not Completed |
|---|---|---|---|
| **Reading:** | | | |
| # Returned Spring 1985 (%) | 215 (41) | 75 (54) | 2 (4) |
| % GPA Greater Than/Equal to 2.0 | 87 | 68 | 50 |
| % Successful Survival | 37 | 36 | 2 |
| % Passing First College-level Course | 92 | 92 | -- |
| **Writing:** | | | |
| # Returned Spring 1985 (%) | 232 (43) | 65 (41) | 0 (0) |
| % GPA Greater Than/Equal to 2.0 | 80 | 66 | -- |
| % Successful Survival | 34 | 27 | 0 |
| % Passing First College-level Course | 93 | 85 | -- |
| **Computation:** | | | |
| # Returned Spring 1985 (%) | | | |
| % GPA Greater Than/Equal to 2.0 | | | |
| % Successful Survival | | | |
| % Passing First College-level Course | | | |
| **Elementary Algebra:** | | | |
| # Returned Spring 1985 (%) | 180 (51) | 99 (41) | 12 ( 7) |
| % GPA Greater Than/Equal to 2.0 | 82 | 80 | 83 |
| % Successful Survival | 42 | 33 | 1 |
| % Passing First College-level Course | 88 | 82 | -- |



## REMEDIAL PROGRAM REMARKS

Students completing remediation at Somerset County College have far less attrition, higher GPA's (except in algebra), and much higher successful survival rates than students who have not completed remediation. Moreover, students who complete the basic English skills remediation have even higher retention rates than those who needed no remediation. As can be seen in the graph, the successful survival rates for remediation-completed students are particularly impressive in the reading program. Thirty-one percent of the students tested required reading remediation, 99 percent of these enrolled in the remedial course(s); 96 percent passed the course and then 92 percent of these passed the subsequent college-level English course.

Post-test data in reading and writing were problematic for the 1983 cohort (student mean scores were reported to have decreased in a reading course from pre- to post-testing), but supplementary data presented from 1984 post-testing shows improved results though still not fully satisfactory. A computation course was added beginning with the Fall 1984 cohort.

## SUSSEX COUNTY COMMUNITY COLLEGE COMMISSION

1983 FULL-TIME COHORT[1]

Students Tested: 93 86 %

### Placement Criteria

Reading*: NJCBSPT RC 165 and Essay evaluation
Writing: (No separate writing course in Fall, '83)
Computation: (No separate computation course in Fall, '83)
El. Algebra**: NJCBSPT MC or EA 165

### Course Placement, Enrollment and Outcomes

| | Reading* | Writing | Computation | El Algebra** |
|---|---|---|---|---|
| % Identified | 42 | | | 82 |
| % Enrolled | 54 | | | 43 |
| % Passing Final Remedial Course | 97 | | | 95 |
| % Reaching Minimum Competency | N/A | | | N/A |

### Cumulative Four-semester Follow Up[2]

| | Remediation Not Needed | Remediation Completed | Remediation Not Completed |
|---|---|---|---|
| Reading*: | | | |
| # Returned Spring 1985 (%) | | | |
| % GPA Greater Than/Equal to 2.0 | | | |
| % Successful Survival | | | |
| % Passing First College-level Course | | | |
| Writing: | | | |
| # Returned Spring 1985 (%) | | | |
| % GPA Greater Than/Equal to 2.0 | | | |
| % Successful Survival | | | |
| % Passing First College-level Course | | | |
| Computation: | | | |
| # Returned Spring 1985 (%) | | | |
| % GPA Greater Than/Equal to 2.0 | | | |
| % Successful Survival | | | |
| % Passing First College-level Course | | | |
| Elementary Algebra**: | | | |
| # Returned Spring 1985 (%) | | | |
| % GPA Greater Than/Equal to 2.0 | | | |
| % Successful Survival | | | |
| % Passing First College-level Course | | | |

---

*"English" (includes reading & writing)

**Includes basic mathematics and algebra

[1] Part-time data given here, since only these students are tested and tracked by institution.

[2] Full-time follow up not applicable.

(Sussex)

## REMEDIAL PROGRAM REMARKS

In 1982, this new college had but one remedial course and contracted for educational services for its students at other nearby colleges. In 1983, two remedial courses were offered and in 1984 the remedial program expanded to two levels in both writing and mathematics and one level in reading. The college tracked only its part-time students attending classes within the Sussex County centers. The remaining full- and part-time students in need of remediation enrolled in the County College of Morris and were reported with that institution's data. Between 95 and 100 percent of the part-time students in need of remediation passed their assigned courses. Their post-test means were all above the minimum competency level.

## UNION COUNTY COLLEGE

1983 FULL-TIME COHORT

Students Tested: 1201 94 %

### Placement Criteria

Reading: NJCBSPT RC 164 (Cranford Campus); 161 (Scotch Plains Campus)
Writing: NJCBSPT SS 169
Computation: NJCBSPT MC 165
El. Algebra: NJCBSPT EA 166 & curriculum that requires math

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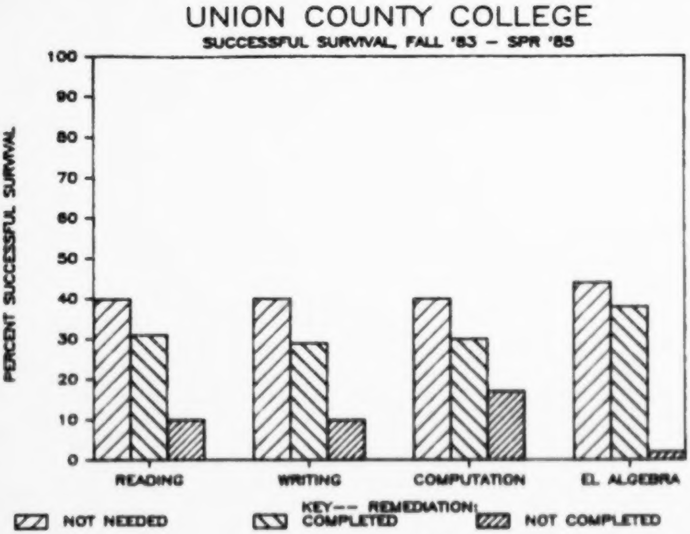
### Course Placement, Enrollment and Outcomes

| | Reading | Writing | Computation | El. Algebra |
|---|---|---|---|---|
| % Identified | 48 | 44 | 53 | 15 |
| % Enrolled | 91 | 90 | 78 | 94 |
| % Passing Final Remedial Course | 61 | 65 | 66 | 66 |
| % Reaching Minimum Competency | N/A | N/A | 93 | 98 |

---

### Cumulative Four-semester Follow Up

| | Remediation Not Needed | Remediation Completed | Remediation Not Completed |
|---|---|---|---|
| Reading: | | | |
| # Returned Spring 1985 (%) | 334 (54) | 198 (62) | 48 (18) |
| % GPA Greater Than/Equal to 2.0 | 75 | 50 | 56 |
| % Successful Survival | 40 | 31 | 10 |
| % Passing First College-level Course | 94 | 89 | -- |
| Writing: | | | |
| # Returned Spring 1985 (%) | 357 (53) | 187 (61) | 43 (20) |
| % GPA Greater Than/Equal to 2.0 | 76 | 49 | 49 |
| % Successful Survival | 40 | 29 | 10 |
| % Passing First College-level Course | 96 | 86 | -- |
| Computation: | | | |
| # Returned Spring 1985 (%) | 309 (55) | 165 (51) | 101 (32) |
| % GPA Greater Than/Equal to 2.0 | 73 | 58 | 52 |
| % Successful Survival | 40 | 30 | 17 |
| % Passing First College-level Course | 87 | 72 | -- |
| Elementary Algebra: | | | |
| # Returned Spring 1985 (%) | 213 (56) | 69 (62) | 24 (35) |
| % GPA Greater Than/Equal to 2.0 | 78 | 61 | 58 |
| % Successful Survival | 44 | 38 | 2 |
| % Passing First College-level Course | 95 | 74 | -- |



## REMEDIAL PROGRAM REMARKS

Union County College did very well in testing most of their full-time students and in enrolling most of them in remedial courses if they needed remediation. The passing rates in remedial courses were reasonable, and, at least in math and algebra, the post-test results were very satisfactory. More than 93 percent of those who completed remediation in computation and 98.2 percent of those who completed remediation in algebra attained the minimum level on the post-test. In-house essay post-tests were used in reading and writing that were modeled on the NJCBSPT. However, the results are difficult to interpret because the college did not provide equated pre-test data or the percentage of students attaining minimum competency.

The follow-up data presents a mixed picture. Non-completers had fairly high retention rates. This was particularly true amongst those needing remediation in computation and algebra where the retention rates were 32 and 35 percent respectively. In terms of the average number of credits earned and of GPA's, the performance of those who completed remediation was much lower than those who did not need remediation, and comparable to those who needed remediation but did not complete it. However, in the first-level college courses, those who completed remediation performed at only a slightly lower level than those who did not need remediation.

Overall, remedial efforts at Union County College appear to be producing desirable results. Better post-test data in the verbal area would help, and there appears to be a need to investigate the better than expected performance of students who do not complete remediation in computation. The college reported that the data on the remediation-incomplete students in computation may be inaccurate because of miscategorizations due to unrecorded summer remedial enrollments and changes in full- vs. part-time status that were not entered into the data-base.

## WARREN COUNTY COMMUNITY COLLEGE COMMISSION

### 1983 FULL-TIME COHORT

Students Tested: 65[1] 83 %[1,2]

### Placement Criteria

| | |
|---|---|
| Reading*: | NJCBSPT Total English 161; Essay 7; high school grades |
| Writing: | (No separate writing course) |
| Computation: | NJCBSPT MC 165 |
| El. Algebra: | NJCBSPT EA 166 |

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### Course Placement, Enrollment and Outcomes

| | Reading* | Writing | Computation | El. Algebra |
|---|---|---|---|---|
| % Identified | 22 | | 11 | 18 |
| % Enrolled | 29 | | 86 | 0 |
| % Passing Final Remedial Course | 100 | | 84 | -- |
| % Reaching Minimum Competency | N/A | | N/A | N/A |

---

### Cumulative Four-semester Follow Up[3]

| | Remediation Not Needed | Remediation Completed | Remediation Not Completed |
|---|---|---|---|
| **Reading*:** | | | |
| # Returned Spring 1985 (%) | N/A | 2 (50) | --[3] |
| % GPA Greater Than/Equal to 2.0 | N/A | 50 | -- |
| % Successful Survival | N/A | 50 | -- |
| % Passing First College-level Course | N/A | 100 | -- |
| **Writing:** | | | |
| # Returned Spring 1985 (%) | | | |
| % GPA Greater Than/Equal to 2.0 | | | |
| % Successful Survival | | | |
| % Passing First College-level Course | | | |
| **Computation:** | | | |
| # Returned Spring 1985 (%) | N/A | 1 (20) | 0 (0) |
| % GPA Greater Than/Equal to 2.0 | N/A | 100 | -- |
| % Successful Survival | N/A | 100 | 0 |
| % Passing First College-level Course | N/A | 100 | -- |
| **Elementary Algebra:** | | | |
| # Returned Spring 1985 (%) | N/A | --[3] | --[3] |
| % GPA Greater Than/Equal to 2.0 | N/A | -- | -- |
| % Successful Survival | N/A | -- | -- |
| % Passing First College-level Course | N/A | -- | -- |

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*Includes reading and writing.

[1] In-county and out-of-state students only (out-of-county, in-state attendees are reported by respective institutions).

[2] However, base N includes students not strictly required to be tested.

[3] Not applicable (study group total N equaled zero at the onset).

(Warren)

## REMEDIAL PROGRAM REMARKS

The college began its remedial program in the spring of 1983. A total of 10 students (of 65 tested) required remediation. Seven of these students were enrolled four semesters later and all of them had passed their first-level college courses in writing and mathematics. No graph is presented because of the small sample size.

## GLASSBORO STATE COLLEGE

### 1983 FULL-TIME COHORT

Students Tested: 1149 100%

### Placement Criteria

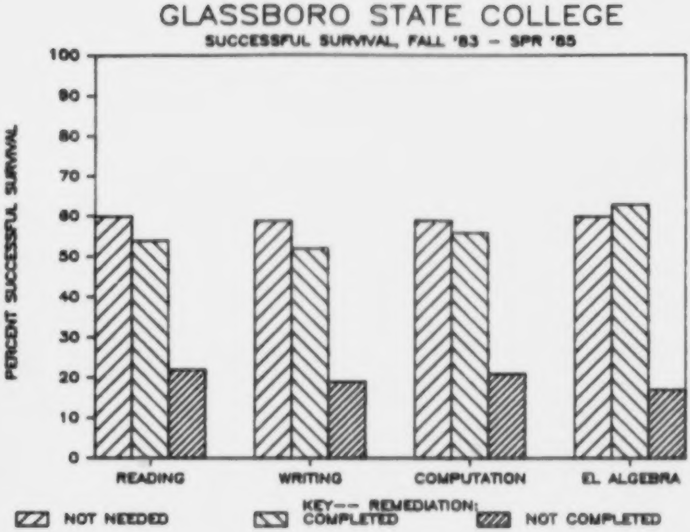
Reading: NJCBSPT RC 168
Writing: NJCBSPT Total English 164 & Essay 7; Total English 167 & Essay 6; Essay 5 or less
Computation: NJCBSPT MC 172
El. Algebra: NJCBSPT EA 175

### Course Placement, Enrollment and Outcomes

| | Reading | Writing | Computation | El. Algebra |
|---|---|---|---|---|
| % Identified | 36 | 28 | 32 | 60 |
| % Enrolled | 99 | 97 | 95 | 95 |
| % Passing Final Remedial Course | 80 | 83 | 87 | 84 |
| % Reaching Minimum Competency | 61 | 97 | 84 | 91 |

### Cumulative Four-semester Follow Up

| | Remediation Not Needed | Remediation Completed | Remediation Not Completed |
|---|---|---|---|
| Reading: | | | |
| # Returned Spring 1985 (%) | 512 (70) | 235 (72) | 34 (40) |
| % GPA Greater Than/Equal to 2.0 | 86 | 75 | 56 |
| % Successful Survival | 60 | 54 | 22 |
| % Passing First College-level Course | 86 | 81 | -- |
| Writing: | | | |
| # Returned Spring 1985 (%) | 565 (68) | 198 (76) | 17 (27) |
| % GPA Greater Than/Equal to 2.0 | 86 | 68 | 71 |
| % Successful Survival | 59 | 52 | 19 |
| % Passing First College-level Course | 87 | 69 | -- |
| Computation: | | | |
| # Returned Spring 1985 (%) | 548 (70) | 203 (73) | 30 (33) |
| % GPA Greater Than/Equal to 2.0 | 84 | 77 | 63 |
| % Successful Survival | 59 | 56 | 21 |
| % Passing First College-level Course | 84 | 73 | -- |
| Elementary Algebra: | | | |
| # Returned Spring 1985 (%) | 321 (70) | 404 (77) | 56 (34) |
| % GPA Greater Than/Equal to 2.0 | 85 | 82 | 48 |
| % Successful Survival | 60 | 63 | 17 |
| % Passing First College-level Course | 88 | 67 | -- |



## REMEDIAL PROGRAM REMARKS

Glassboro State College is remarkable for the consistency of results achieved in both testing and placement of remedial students as well as student outcomes of both its remedial program administration and of its student outcome measures. Both testing and remedial enrollment percentages exceed 95 percent in all four disciplines. Successful survival rates of remediation-completed students are very close to those of non-remedial students.

Of particular note is the college's performance in the elementary algebra program. Fully 60 percent of the freshmen class is identified as needing algebra remediation (690 students); 95 percent of them are enrolled in the remedial courses; 84 percent of these pass; and 91 percent of the passing students reach the colleges's minimum competency criterion. While this is a large program for the college to maintain, the pay off, as the accompanying graph shows, is in the fact that the successful survival rate of algebra-remediated students exceeds that of non-remediated students.

An area the college might investigate is the performance of its remediation-completed students in college-level writing work. The first "regular" college-level writing course was passed by 87 percent of non-remedial students but only 69 percent of remediation-completed students. The college reports that 97 percent of the remediation-completed students in writing met their minimum competence criterion (an essay score of 7). Raising the exit criterion could yield higher passing rates for the students who enter the first composition course.

# JERSEY CITY STATE COLLEGE

## 1983 FULL-TIME COHORT

Students Tested: 593 99 %

### Placement Criteria

Reading: NJCBSPT RC 155 and in-house disgnostic test
Writing: In-house essay (300 words, one-hour)
Computation: NJCBSPT MC 166
El. Algebra: NJCBSPT EA 176

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### Course Placement, Enrollment and Outcomes

| | Reading | Writing | Computation | El. Algebra |
|---|---|---|---|---|
| % Identified | 45 | 36 | 53 | 81 |
| % Enrolled | 79 | 100 | 94 | 94 |
| % Passing Final Remedial Course | 84 | 64 | 85 | 80 |
| % Reaching Minimum Competency | 78 | 43 | 68 | N/A |

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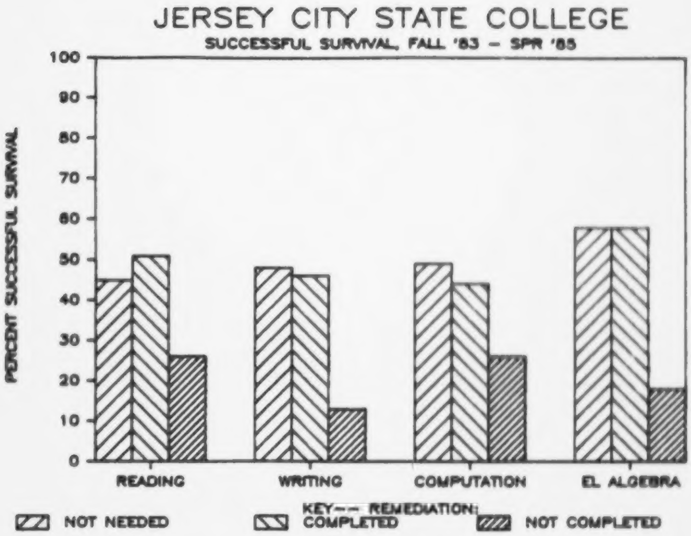
### Cumulative Four-semester Follow Up

| | Remediation Not Needed | Remediation Completed | Remediation Not Completed |
|---|---|---|---|
| **Reading:** | | | |
| # Returned Spring 1985 (%) | 184 (57) | 93 (67) | 53 (41) |
| % GPA Greater Than/Equal to 2.0 | 80 | 76 | 63 |
| % Successful Survival | 45 | 51 | 26 |
| % Passing First College-level Course | 83 | 65 | -- |
| **Writing:** | | | |
| # Returned Spring 1985 (%) | 216 (57) | 93 (69) | 22 (29) |
| % GPA Greater Than/Equal to 2.0 | 85 | 66 | 46 |
| % Successful Survival | 48 | 46 | 13 |
| % Passing First College-level Course | 80 | 80 | -- |
| **Computation:** | | | |
| # Returned Spring 1985 (%) | 170 (61) | 104 (60) | 52 (36) |
| % GPA Greater Than/Equal to 2.0 | 80 | 73 | 71 |
| % Successful Survival | 49 | 44 | 26 |
| % Passing First College-level Course | 70 | 67 | -- |
| **Elementary Algebra:** | | | |
| # Returned Spring 1985 (%) | 78 (67) | 82 (67) | 10 (25) |
| % GPA Greater Than/Equal to 2.0 | 86 | 87 | 65 |
| % Successful Survival | 58 | 58 | 18 |
| % Passing First College-level Course | 72 | 67 | -- |



REMEDIAL PROGRAM REMARKS

For the cohort of students that entered the college in the fall of 1983, Jersey City State had "remedial" and "developmental" course levels in reading and computation. Since the college's placement cut-off scores in the "developmental" area were in the range of "remedial" courses elsewhere, the data for this report consider exit of the "developmental" course as the end of remediation. The college reported changing this policy to include a broader range of placement test scores for the fall of 1984 in mathematics and the fall of 1985 in reading.

As the accompanying graph indicates, the percentages of "successful survival" of remediation-completed students are generally very similar to those of students who did not need remediation. Successful survival rates (44-58%), as the college points out in its own report, tend to be lower in general than those of other four-year state institutions. This is attributed by the college to the urban, working, commuting nature of its student population. Given that context, remediation efforts appear to be producing satisfactory results. Remediation-completed students are two to three times more likely to survive through sophomore year than those who do not complete remediation.

Post-test scores are reported on students exiting remediation in reading, writing and computation, but not in algebra. While 84 percent and 64 percent of students passed the reading and the writing remediation sequences respectively, the college's in-house post-test found that, of those students, only 78 percent and 43 percent reached minimum competance criteria. These statistics should be of concern to the college in that the successful survival rates and GPA's of remediation-completed students could be even better if exit criteria from remediation were more strict.

## KEAN COLLEGE OF NEW JERSEY

1983 FULL-TIME COHORT

Students Tested: 1003 97 %

### Placement Criteria

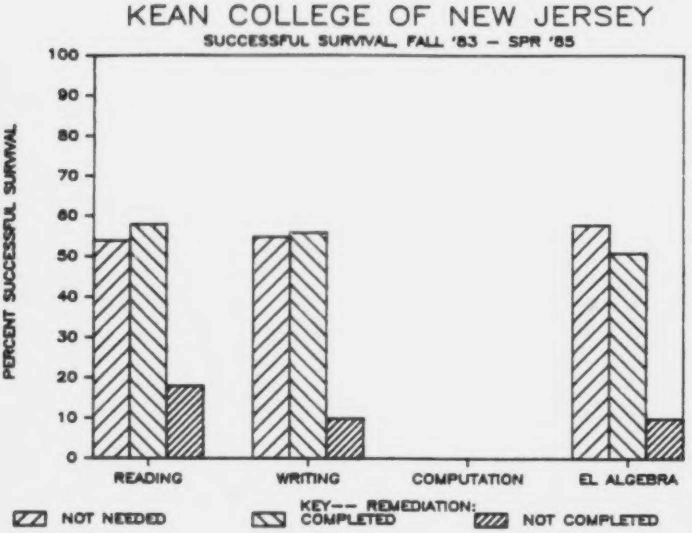
Reading: Nelson-Denny 12.0 grade level
Writing: NJCBSPT Essay 6; Essay 7 & SS 166
Computation: (No course in computation)
El. Algebra: NJCBSPT EA 164 & major requiring math or EA 168 & other major

### Course Placement, Enrollment and Outcomes

| | Reading | Writing | Computation | El. Algebra |
|---|---|---|---|---|
| % Identified | 29 | 35 | | 34 |
| % Enrolled | 94 | 97 | | 97 |
| % Passing Final Remedial Course | 81 | 75 | | 70 |
| % Reaching Minimum Competency | N/A | 79 | | 77 |

### Cumulative Four-semester Follow Up

| | Remediation Not Needed | Remediation Completed | Remediation Not Completed |
|---|---|---|---|
| Reading: | | | |
| # Returned Spring 1985 (%) | 470 (66) | 173 (76) | 16 (28) |
| % GPA Greater Than/Equal to 2.0 | 82 | 76 | 63 |
| % Successful Survival | 54 | 58 | 18 |
| % Passing First College-level Course | 88 | 88 | -- |
| Writing: | | | |
| # Returned Spring 1985 (%) | 424 (65) | 223 (79) | 12 (19) |
| % GPA Greater Than/Equal to 2.0 | 86 | 72 | 50 |
| % Successful Survival | 55 | 56 | 10 |
| % Passing First College-level Course | 89 | 84 | -- |
| Computation: | | | |
| # Returned Spring 1985 (%) | | | |
| % GPA Greater Than/Equal to 2.0 | | | |
| % Successful Survival | | | |
| % Passing First College-level Course | | | |
| Elementary Algebra: | | | |
| # Returned Spring 1985 (%) | 462 (70) | 183 (70) | 14 (18) |
| % GPA Greater Than/Equal to 2.0 | 84 | 73 | 57 |
| % Successful Survival | 58 | 51 | 10 |
| % Passing First College-level Course | 83 | 71 | -- |



## REMEDIAL PROGRAM REMARKS

Kean is one of the few colleges where the successful survival rates of remediation-completed students in reading and writing actually exceed those of non-remedial students. In elementary algebra, remediation-completed students had successful survival rates very similar to non-remedial students (51 vs. 58%).

Kean's developmental mathematics program offers no formal classes in computation for students with low computation scores. However, the college reports that attention is given to these individuals in a variety of other forms. Students enrolled in the algebra courses who also need help with computation skills are provided the necessary assistance in the algebra classes themselves and also in a special assistance program developed through the college's microcomputer center.

Post-testing data were reported for Fall 1983 students at the end of one year. Cumulative data for this group (through Spring 1985) were not available. The one-year outcomes, however, were encouraging in elementary algebra (77% reached minimum competency) and in writing (79%). Pre- and post-testing in reading utilized the Nelson-Denny test, but neither equating with the NJCBSPT nor minimum competency data were available.

## MONTCLAIR STATE COLLEGE

### 1983 FULL-TIME COHORT

Students Tested: 1612 100%

### Placement Criteria

Reading: NJCBSPT RC 168
Writing: NJCBSPT Total English 160
Computation: NJCBSPT MC 161 if subject to algebra requirement or MC 169 if not
El. Algebra: NJCBSPT EA 178 and major requiring algebra

### Course Placement, Enrollment and Outcomes

| | Reading | Writing | Computation | El. Algebra |
|---|---|---|---|---|
| % Identified | 25 | 9 | 16 | 47 |
| % Enrolled | 96 | 99 | 98 | 99[1] |
| % Passing Final Remedial Course | 98 | 92 | 92 | 93 |
| % Reaching Minimum Competency | 60 | N/A | 84 | 79 |

### Cumulative Four-semester Follow Up

| | Remediation Not Needed | Remediation Completed | Remediation Not Completed |
|---|---|---|---|
| **Reading:** | | | |
| # Returned Spring 1985 (%) | 841 (75) | 348 (76) | 3 (11) |
| % GPA Greater Than/Equal to 2.0 | 99 | 83 | 100 |
| % Successful Survival | 71 | 61 | 11 |
| % Passing First College-level Course | 99 | 99 | -- |
| **Writing:** | | | |
| # Returned Spring 1985 (%) | 1102 (76) | 90 (63) | 0 (0) |
| % GPA Greater Than/Equal to 2.0 | 94 | 71 | -- |
| % Successful Survival | 70 | 42 | 0 |
| % Passing First College-level Course | 99 | 97 | -- |
| **Computation:** | | | |
| # Returned Spring 1985 (%) | 1024 (76) | 166 (70) | 2 (8) |
| % GPA Greater Than/Equal to 2.0 | 94 | 86 | 50 |
| % Successful Survival | 70 | 57 | 8 |
| % Passing First College-level Course | 97 | 68 | -- |
| **Elementary Algebra:** | | | |
| # Returned Spring 1985 (%) | 461 (76) | 522 (72) | 12 (44) |
| % GPA Greater Than/Equal to 2.0 | 97 | 89 | 58 |
| % Successful Survival | 73 | 63 | 7 |
| % Passing First College-level Course | 90 | 93 | -- |

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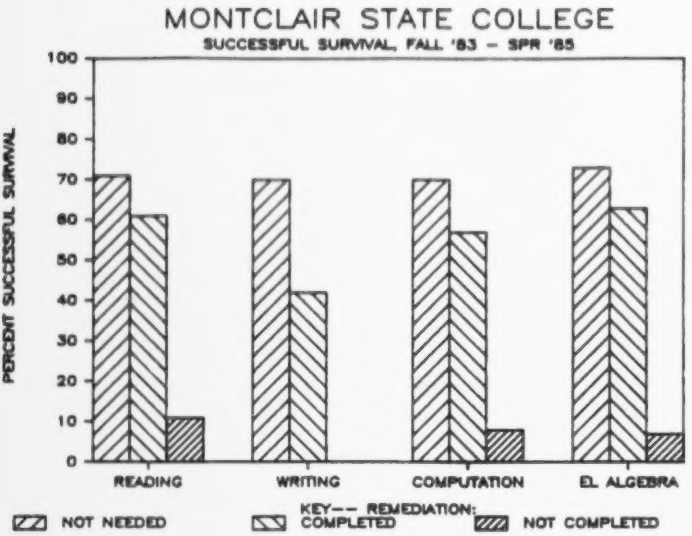
[1] Includes 18 students enrolled in Intermediate Algebra, which the institution does not consider a remedial course.



## REMEDIAL PROGRAM REMARKS

Montclair State has the largest freshmen enrollment among the state colleges and also has high retention and successful survival rates. Virtually all (96-99%) of the students which the college identifies as needing remediation were enrolled in the courses by the fourth semester.

With the exception of the writing program, students who complete remediation perform nearly as well as non-remedial students (see graph). The writing program consistently has been anomalous both in comparison to state-wide standards and to the other remedial efforts at Montclair. The criteria used for placement into writing remediation are the lowest in the state, resulting in an unusually small percentage (9.5%) of freshmen being identified as needing writing remediation. Only 152 students were enrolled in remedial writing as compared to 393 students in remedial reading, 753 in computation and 741 in algebra. The students who exited the remedial writing program had the lowest successful survival rates (60% vs. 86% in reading) of Montclair's remedial programs. The college reports no post-testing data for the students exiting writing remediation.

Low placement criteria normally result in "over placing" students into regular college-level courses (English Composition, for example) for which they are underprepared. Yet, Montclair, which seems to be "over placing" students into English Composition, shows a 99 percent passing rate for those 1,052 students. It is recommended that the college review its placement and exit (post-testing) standards for writing remediation and the grading practices in its English Compostion course.

## RAMAPO COLLEGE OF NEW JERSEY

1983 FULL-TIME COHORT

Students Tested: 353 91 %

### Placement Criteria

Reading: NJCBSPT RC 169
Writing: NJCBSPT Essay 8
Computation: NJCBSPT MC 167
El. Algebra: NJCBSPT EA 190

### Course Placement, Enrollment and Outcomes

| | Reading | Writing | Computation | El. Algebra |
|---|---|---|---|---|
| % Identified | 48[1] | 56[1] | 21 | 94 |
| % Enrolled | 61 | 80 | 59 | 41 |
| % Passing Final Remedial Course | 81 | 77 | 66 | 73 |
| % Reaching Minimum Competency | 45 | N/A | 100 | 100 |

### Cumulative Four-semester Follow Up

| | Remediation Not Needed | Remediation Completed | Remediation Not Completed |
|---|---|---|---|
| Reading: | | | |
| # Returned Spring 1985 (%) | 95 (36) | 65 (46) | 17 (52) |
| % GPA Greater Than/Equal to 2.0 | 89 | 74 | 80 |
| % Successful Survival | 32 | 34 | 41 |
| % Passing First College-level Course | 96 | 91 | -- |
| Writing: | | | |
| # Returned Spring 1985 (%) | 71 (34) | 97 (62) | 12 (16) |
| % GPA Greater Than/Equal to 2.0 | 92 | 81 | 71 |
| % Successful Survival | 32 | 50 | 12 |
| % Passing First College-level Course | 83 | 85 | -- |
| Computation: | | | |
| # Returned Spring 1985 (%) | 150 (40) | 23 (53) | 2 (11) |
| % GPA Greater Than/Equal to 2.0 | 85 | 65 | 50 |
| % Successful Survival | 34 | 35 | 5 |
| % Passing First College-level Course | 92 | 100 | -- |
| Elementary Algebra: | | | |
| # Returned Spring 1985 (%) | 39 (37) | 94 (69) | 23 (12) |
| % GPA Greater Than/Equal to 2.0 | 79 | 92 | 85 |
| % Successful Survival | 29 | 64 | 10 |
| % Passing First College-level Course | 93 | 89 | -- |

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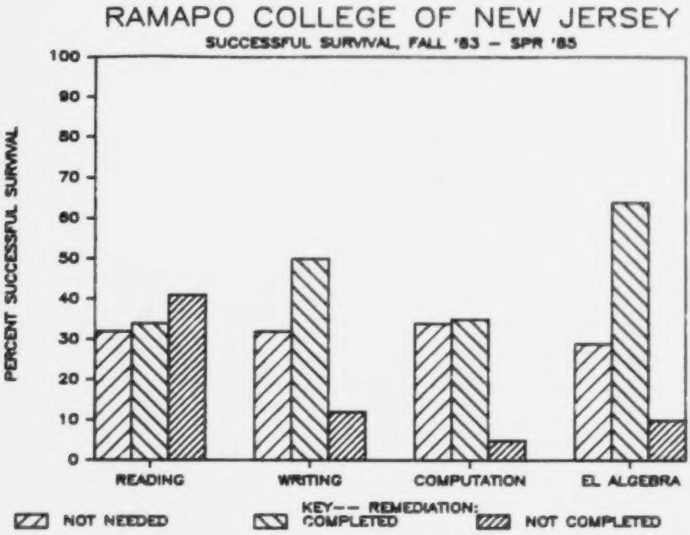
[1] Remedial and Developmental Programs combined; Developmental Program, although a basic skills program, is not considered by institution to be remedial.



REMEDIAL PROGRAM REMARKS

The retention rates of remediation-completed students at Ramapo are nearly double (53 to 69%) those of non-remedial students. However, it should be noted that the two-year retention rates for non-remedial students at this college (36 to 40%) are unusually low. Moreover, examination of the accompanying graph reveals that Ramapo's remedial programs vary widely in outcomes. The Algebra program appears particularly adept at preparing exiting students for successful survival at the college (64% of the algebra-remediated students were retained with at least a "C" average through four semesters). In contrast, the data given by the college indicate that the 14 students who did not complete the required reading remediation had better rates of successful survival than the 48 students who did complete remediation.

Major curricular changes are occurring at Ramapo, beginning with changes made towards the end of this two-year reporting cycle. Courses at the college (including the Basic Skills program) are being changed from a four credit per course format to three credits per course. The low retention rates among its non-remedial students and the variability noted in the remedial programs should be matters of serious concern for this institution.

## RICHARD STOCKTON STATE COLLEGE

1983 FULL-TIME COHORT

Students Tested: 805 100%

Placement Criteria

| | |
|---|---|
| Reading*: | NJCBSPT sum of 69 (possible 85) on RC & SS |
| Writing: | NJCBSPT Essay 7, sum of 68 (possible 85) on RC & SS |
| Computation**: | NJCBSPT MC 169 |
| El. Algebra: | (No algebra course) |

---

Course Placement, Enrollment and Outcomes

| | Reading* | Writing | Computation** | El. Algebra |
|---|---|---|---|---|
| % Identified | 38 | 47 | 34 | |
| % Enrolled | 100 | 100 | 100 | |
| % Passing Final Remedial Course | 90 | 91 | 88 | |
| % Reaching Minimum Competency | N/A | N/A | 69 | |

---

Cumulative Four-semester Follow Up

| | Remediation Not Needed | Remediation Completed | Remediation Not Completed |
|---|---|---|---|
| Reading*: | | | |
| # Returned Spring 1985 (%) | 351 (71) | 205 (72) | 0 (0) |
| % GPA Greater Than/Equal to 2.0 | 84 | 69 | -- |
| % Successful Survival | 59 | 50 | 0 |
| % Passing First College-level Course | 93 | 86 | -- |
| Writing: | | | |
| # Returned Spring 1985 (%) | 301 (71) | 255 (72) | 0 (0) |
| % GPA Greater Than/Equal to 2.0 | 81 | 75 | -- |
| % Successful Survival | 57 | 54 | 0 |
| % Passing First College-level Course | 83 | 91 | -- |
| Computation**: | | | |
| # Returned Spring 1985 (%) | 365 (69) | 191 (74) | 0 (0) |
| % GPA Greater Than/Equal to 2.0 | 83 | 70 | -- |
| % Successful Survival | 57 | 52 | 0 |
| % Passing First College-level Course | 94 | 92 | -- |
| Elementary Algebra: | | | |
| # Returned Spring 1985 (%) | | | |
| % GPA Greater Than/Equal to 2.0 | | | |
| % Successful Survival | | | |
| % Passing First College-level Course | | | |

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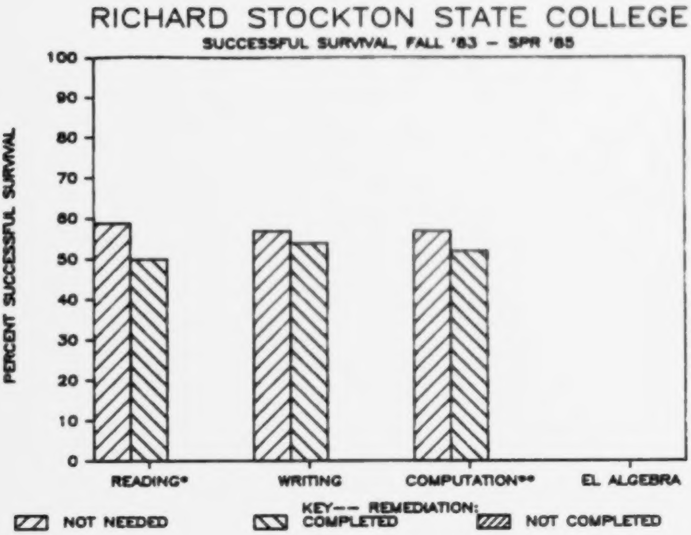
*BASK 1102: "Study Skills and Critical Thinking."
**BASK 1103: "Quantitative Reasoning."

 RICHARD STOCKTON STATE COLLEGE

SUCCESSFUL SURVIVAL, FALL '83 – SPR '85

REMEDIAL PROGRAM REMARKS

Stockton State's Basic Skills program is structured differently than that of other state colleges. A "Study Skills and Critical Thinking" course combines reasoning, critical reading and argument development. A "Quantitative Reasoning" course combines computational skills, some algebra and statistics in a way that makes it inappropriate to categorize this course as either computation or algebra. There are no "remediation-not-completed" groups in the fourth semester because Stockton's policy is to dismiss all full-time students who have not completed remediation in two semesters.

Very high percentages (88-91%) of students who are placed into remediation pass the courses. "Remediation-completed" students have GPA's and successful survival rates that are very much like non-remedial students. This should be regarded as a mark of program success. This is particularly true in light of the fact that Stockton has developed a cost-effective model for remediation that requires students to eliminate skills deficiencies by the end of their freshman year, and that staffs the remedial program by redirecting part of the efforts of the regular faculty and by using non-remedial students as tutors. The college claims that their model limits the amount of institutional resources which must be diverted to the task of remediation, without any apparent adverse affect on the ultimate success rate of skills-deficient students.

However, there are some concerns about the implementation of remediation at Stockton. The "one semester only" model of remedial course

## REMEDIAL PROGRAM REMARKS, CONTINUED

work, followed by one more semester of tutoring would seem to place a heavy burden on student tutors who must cope with the students (about 85) who fail the remedial courses on first attempt. A follow-up analysis of students who do not successfully complete remediation after tutoring in the second semester may be instructive for the college.

While post-testing results are reported and gains are noted from pre- to post-testing, the criteria used for assessing minimum competency in Stockton's Quantitative Methods course are low. For example, in that course, which is passed by 87 percent of students, the mean post-test score on the NJCBSPT Algebra test (a standard score of 168-169) is lower than the remedial placement entrance criteria at several other state colleges.

# TRENTON STATE COLLEGE

## 1983 FULL-TIME COHORT

Students Tested: 969 98 %[1]

### Placement Criteria

Reading: NJCBSPT RC 168
Writing: NJCBSPT Essay 8
Computation: NJCBSPT MC 172
El. Algebra: NJCBSPT EA 176

### Course Placement, Enrollment and Outcomes

| | Reading | Writing | Computation | El. Algebra |
|---|---|---|---|---|
| % Identified | 25 | 33 | 28 | 42 |
| % Enrolled | 96 | 96 | 94 | 95 |
| % Passing Final Remedial Course | 90 | 92 | 78 | 77 |
| % Reaching Minimum Competency | 93 | N/A | 100 | 98 |

### Cumulative Four-semester Follow Up

| | Remediation Not Needed | Remediation Completed | Remediation Not Completed |
|---|---|---|---|
| Reading: | | | |
| # Returned Spring 1985 (%) | 611 (77) | 108 (70) | 9 (33) |
| % GPA Greater Than/Equal to 2.0 | 93 | 71 | 56 |
| % Successful Survival | 71 | 50 | 19 |
| % Passing First College-level Course | 98 | 92 | -- |
| Writing: | | | |
| # Returned Spring 1985 (%) | 622 (90) | 190 (75) | 16 (46) |
| % GPA Greater Than/Equal to 2.0 | 92 | 82 | 88 |
| % Successful Survival | 70 | 62 | 40 |
| % Passing First College-level Course | 98 | 93 | -- |
| Computation: | | | |
| # Returned Spring 1985 (%) | 535 (76) | 163 (31) | 30 (41) |
| % GPA Greater Than/Equal to 2.0 | 93 | 80 | 67 |
| % Successful Survival | 71 | 65 | 27 |
| % Passing First College-level Course | 93 | 82 | -- |
| Elementary Algebra: | | | |
| # Returned Spring 1985 (%) | 443 (78) | 241 (80) | 44 (41) |
| % GPA Greater Than/Equal to 2.0 | 95 | 83 | 68 |
| % Successful Survival | 74 | 66 | 28 |
| % Passing First College-level Course | 92 | 86 | -- |

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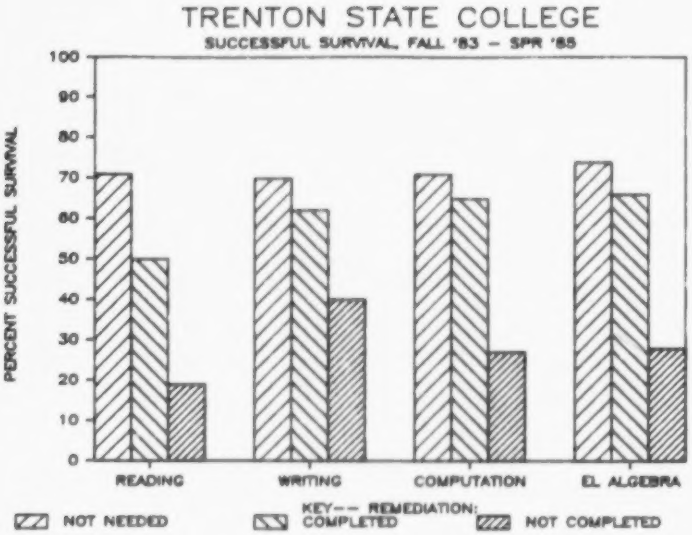
[1] Based on 987 students required to be tested (sum of FT and PT), since original FT/PT breakout (967/20) no longer applies.



## REMEDIAL PROGRAM REMARKS

Trenton State reports the highest retention and successful survival rates among non-remedial students of any state college. These rates set a high standard for Trenton's remedial programs to match. With the exception of the reading program, the successful survival rates of Trenton's remediation-completed students are close to those of non-remedial students.

In the reading program, 93 percent of exiting students reach the minimum criterion on the post-test and 92 percent pass the freshman composition course. However, the grade point averages of the 108 students who completed reading remediation were typically 0.2 points lower than those of remediation-completed students in other areas. A transcript analysis of the subsequent college-level courses taken by those students might be conducted to investigate the reasons further.

# WILLIAM PATERSON COLLEGE OF NEW JERSEY

## 1983 FULL-TIME COHORT

Students Tested: 1271 100%

### Placement Criteria

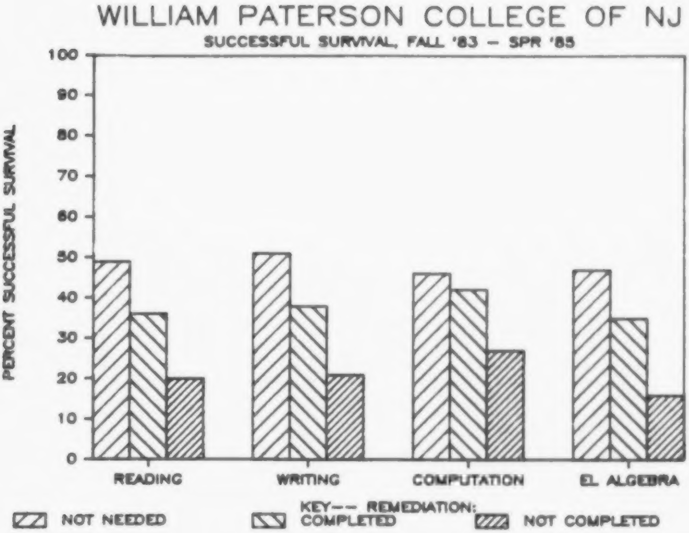
Reading: NJCBSPT RC 165, SAT-V 400 or Nelson-Denny 4th stanine
Writing: NJCBSPT Essay 7, SS 168
Computation: NJCBSPT MC 169
El. Algebra: NJCBSPT EA 175 and math-related major

### Course Placement, Enrollment and Outcomes

| | Reading | Writing | Computation | El. Algebra |
|---|---|---|---|---|
| % Identified | 24 | 41 | 23 | 14 |
| % Enrolled | 89 | 92 | 98 | 69 |
| % Passing Final Remedial Course | 87 | 91 | 89 | 77 |
| % Reaching Minimum Competency | 92 | 90 | 88 | 73 |

### Cumulative Four-semester Follow Up

| | Remediation Not Needed | Remediation Completed | Remediation Not Completed |
|---|---|---|---|
| Reading: | | | |
| # Returned Spring 1985 (%) | 614 (67) | 167 (74) | 37 (36) |
| % GPA Greater Than/Equal to 2.0 | 73 | 47 | 57 |
| % Successful Survival | 49 | 36 | 20 |
| % Passing First College-level Course | 86 | 80 | -- |
| Writing: | | | |
| # Returned Spring 1985 (% | 471 (68) | 309 (67) | 38 (39) |
| % GPA Greater Than/Equal to 2.0 | 75 | 56 | 53 |
| % Successful Survival | 51 | 38 | 21 |
| % Passing First College-level Course | 85 | 78 | -- |
| Computation: | | | |
| # Returned Spring 1985 (%) | 593 (64) | 178 (74) | 47 (53) |
| % GPA Greater Than/Equal to 2.0 | 71 | 56 | 51 |
| % Successful Survival | 46 | 42 | 27 |
| % Passing First College-level Course | 82 | 77 | -- |
| Elementary Algebra: | | | |
| # Returned Spring 1985 (%) | 720 (68) | 69 (61) | 29 (36) |
| % GPA Greater Than/Equal to 2.0 | 69 | 57 | 45 |
| % Successful Survival | 47 | 35 | 16 |
| % Passing First College-level Course | 79 | 78 | -- |



REMEDIAL PROGRAM REMARKS

The successful survival rates for this college show a relatively even pattern across the four skill areas, with remediation-completed students approaching but never reaching the rates of non-remedial students. The remediation-completed students show roughly twice the rate of successful survival compared with the small numbers of students who remained but did not complete remediation (about 20 in each discipline).

Remediation-completed students at this institution pass their subsequent college-level courses at rates similar to non-remedial students. Post-testing procedures are in place in all remedial areas with multiple indicators used to assess minimum competence before exit from remediation.

The college requires remediation in algebra only for students with math-related majors. As noted in last year's analysis, this policy tends to under-represent the need for algebra remediation on this campus. Only 14 percent of the freshmen (179 students) were thus identified as needing remediation in 9th grade level algebra. Of these, 59 percent were enrolled in remediation (a low percentage). By the end of the second semester students may change majors and thus become obligated to take algebra remediation. In contrast, the college places 522 students (41%) into writing remediation and 92 percent of these take the course. It is quite possible for students in a non-math related major to graduate from this college without attaining even 9th grade algebra competency. The college indicates that about 60 percent of the entering cohort does select a mathematics-related major. The Basic Skills Council recommends a review of this placement policy at William Paterson.

## THOMAS A. EDISON STATE COLLEGE

1983 FULL-TIME COHORT[1]

Students Tested: 53 82 %

### Placement Criteria

| | |
|---|---|
| Reading: | NJCBSPT RC 165 |
| Writing: | NJCBSPT SS 164, Essay 7 |
| Computation: | NJCBSPT MC 166 |
| El. Algebra: | NJCBSPT EA 176 |

### Course Placement, Enrollment and Outcomes

| | Reading | Writing | Computation | El. Algebra |
|---|---|---|---|---|
| % Identified | 9 | 15 | 25 | 75 |
| % Enrolled | 100 | 100 | 100 | 10 |
| % Passing Final Remedial Course | 100 | 100 | -- | 100 |
| % Reaching Minimum Competency[2] | N/A | N/A | N/A | N/A |

### Cumulative Four-semester Follow Up[2]

| | Remediation Not Needed | Remediation Completed | Remediation Not Completed |
|---|---|---|---|
| Reading: | | | |
| # Returned Spring 1985 (%) | 20 (43) | 2 (67) | 0 (0) |
| % GPA Greater Than/Equal to 2.0 | | | |
| % Successful Survival | 44 | 66 | 0 |
| % Passing First College-level Course | | | |
| Writing: | | | |
| # Returned Spring 1985 (%) | 21 (49) | 1 (33) | 0 (0) |
| % GPA Greater Than/Equal to 2.0 | | | |
| % Successful Survival | 49 | 33 | 0 |
| % Passing First College-level Course | | | |
| Computation: | | | |
| # Returned Spring 1985 (%) | 20 (53) | 2 (22) | 0 (0) |
| % GPA Greater Than/Equal to 2.0 | | | |
| % Successful Survival | 53 | 22 | 0 |
| % Passing First College-level Course | | | |
| Elementary Algebra: | | | |
| # Returned Spring 1985 (%) | 7 (58) | 7 (23) | 8 (89) |
| % GPA Greater Than/Equal to 2.0 | | | |
| % Successful Survival | 59 | 23 | 89 |
| % Passing First College-level Course | | | |

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[1] Institution reports students as part-time only.
[2] Most follow-up data not applicable, since courses are taught elsewhere.

(T A Edison)

## REMEDIAL PROGRAM REMARKS

Thomas A. Edison State College offers external degrees to adult students. Although Edison serves the "distant" learner and does not itself provide remedial instruction, it does require that its students with less than 30 credits be tested with the NJCBSPT (71 were required to be tested in 1983). Remedial work is taken at other colleges and exit from required remediation must be documented by the host college before Edison will award credits.

The results of the Edison students tracked who received remediation in other colleges are displayed in the tables, but the graph is not appropriate in this case.

# NEW JERSEY INSTITUTE OF TECHNOLOGY

## 1983 FULL-TIME COHORT

Students Tested: 582 100%

### Placement Criteria

| | |
|---|---|
| Reading*: | NJCBSPT RC 165; Essay 7; SAT-RC 40; SAT-V 400; TSWE 40 |
| Writing: | NJCBSPT Composition 165; Essay 7; SAT-V 400; TSWE 40 |
| Computation: | (No course in computation) |
| El. Algebra**: | NJCBSPT EA 182; NJIT Math-Physics Test 14; SAT-M 510; Math Level I Achievement 510 |

### Course Placement, Enrollment and Outcomes

| | Reading* | Writing | Computation | El.Algebra** |
|---|---|---|---|---|
| % Identified | 8 | 13 | | 37 |
| % Enrolled | 100 | 100 | | 97[1] |
| % Passing Final Remedial Course | 71 | 95 | | 85 |
| % Reaching Minimum Competency | 73 | N/A | | N/A |

### Cumulative Four-semester Follow Up

| | Remediation Not Needed | Remediation Completed | Remediation Not Completed |
|---|---|---|---|
| Reading*: | | | |
| # Returned Spring 1985 (%) | 336 (63) | 20 (57) | 6 (43) |
| % GPA Greater Than/Equal to 2.0 | 85 | 75 | 50 |
| % Successful Survival | 54 | 43 | 21 |
| % Passing First College-level Course | 89 | 74 | -- |
| Writing: | | | |
| # Returned Spring 1985 (%) | 319 (63) | 43 (60) | 0 (0) |
| % GPA Greater Than/Equal to 2.0 | 85 | 79 | -- |
| % Successful Survival | 54 | 47 | 0 |
| % Passing First College-level Course | 89 | 84 | -- |
| Computation: | | | |
| # Returned Spring 1985 (%) | | | |
| % GPA Greater Than/Equal to 2.0 | | | |
| % Successful Survival | | | |
| % Passing First College-level Course | | | |
| Elementary Algebra**: | | | |
| # Returned Spring 1985 (%) | 252 (68) | 106 (61) | 4 (11) |
| % GPA Greater Than/Equal to 2.0 | 76 | 76 | 75 |
| % Successful Survival | 60 | 46 | 8 |
| % Passing First College-level Course | 85 | 82 | -- |

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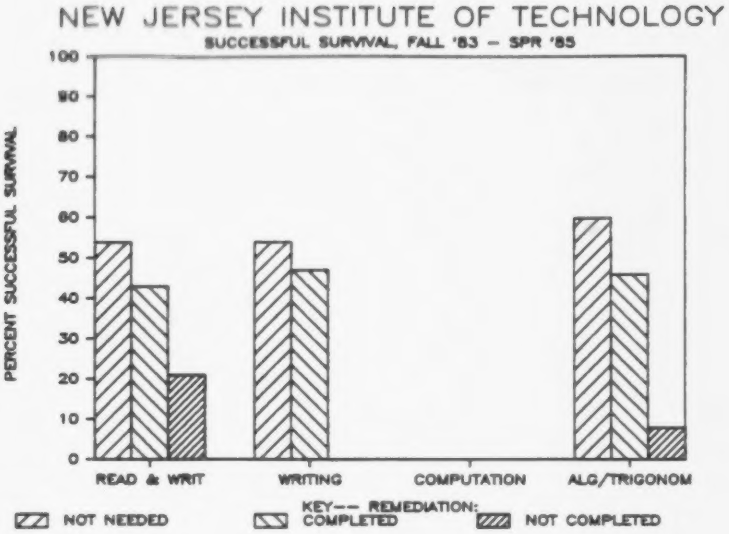
*Includes reading & writing.
**Includes trigonometry.
[1] Six students advised to take pre-calculus took Calculus I instead.



## REMEDIAL PROGRAM REMARKS

New Jersey Institute of Technology (NJIT), the state's comprehensive technical university, offers a broad range of undergraduate degree programs with particular emphasis on engineering, architecture, computer science, management, and the sciences. All programs include a diverse course load requiring both professional study and the liberal arts. The university's core requirements include writing and humanities courses which have the same basic reading and writing prerequisites as in predominantly liberal arts institutions. Combined enrollment in reading and writing remedial courses was 125 students. Virtually all of them completed remediation within two semesters, and their successful survival rates for four semesters are close to those of non-remedial students. NJIT uses multiple indicators (6) for both placement and exit criteria.

Remedial mathematics at NJIT (Intermediate Algebra and Trigonometry) would be considered college-level mathematics at most liberal arts colleges. This is a crucial program for the institution because mathematics is integral to the entire subsequent curriculum and because 37 percent of its freshmen are placed into this sequence. The program appears to serve its purpose in that passing rates in the first college-level course (Calculus) are nearly identical for non-remedial (84.8%) and remediation-completed students (82.4%).

## RUTGERS, THE STATE UNIVERSITY OF NEW JERSEY-- CAMDEN

### 1983 FULL-TIME COHORT

Students Tested: 342 94 %

### Placement Criteria

Reading: NJCBSPT RC 171; McGraw Hill Reading Test 50th percentile
Writing: NJCBSPT SS 169
Computation: (No course in computation)
El. Algebra: NJCBSPT EA 167 or MC 166

### Course Placement, Enrollment and Outcomes

| | Reading | Writing | Computation | El. Algebra |
|---|---|---|---|---|
| % Identified | 28 | 21 | | 18 |
| % Enrolled | 66* | 37* | | 76 |
| % Passing Final Remedial Course | 97 | 78 | | 82 |
| % Reaching Minimum Competency | N/A | N/A | | N/A |

### Cumulative Four-semester Follow Up

| | Remediation Not Needed | Remediation Completed | Remediation Not Completed |
|---|---|---|---|
| Reading[1]: | | | |
| # Returned Spring 1985 (%) | 186 (75) | 54* (64*) | 5* (50*) |
| % GPA Greater Than/Equal to 2.0 | 89 | 82* | 100 |
| % Successful Survival | 67 | 52 | 50* |
| % Passing First College-level Course | 97 | 96 | -- |
| Writing[1]: | | | |
| # Returned Spring 1985 (%) | 200 (74) | 40* (56) | 5* (42*) |
| % GPA Greater Than/Equal to 2.0 | 88 | 85* | 100 |
| % Successful Survival | 65 | 56 | 42* |
| % Passing First College-level Course | 97 | 95 | -- |
| Computation: | | | |
| # Returned Spring 1985 (%) | | | |
| % GPA Greater Than/Equal to 2.0 | | | |
| % Successful Survival | | | |
| % Passing First College-level Course | | | |
| Elementary Algebra: | | | |
| # Returned Spring 1985 (%) | 208 (75) | 20 (63) | 17 (55) |
| % GPA Greater Than/Equal to 2.0 | 87 | 90 | 88 |
| % Successful Survival | 65 | 56 | 48 |
| % Passing First College-level Course | 97 | 100 | -- |

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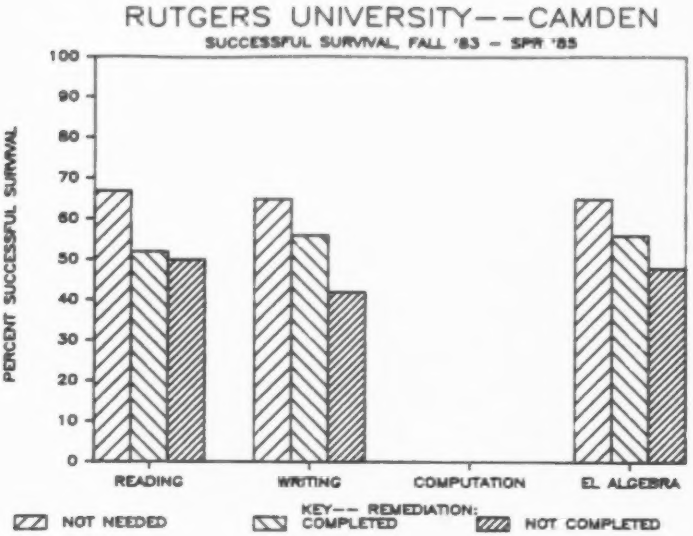
*Additional data from Summer 1983 (not available at time of original data compilation) indicate that reading and writing enrollments were 94% and 63% respectively. Resultant inaccuracies (in most cases small) are similarly noted.

[1] Criterion for completion (second and third study groups) is enrollment in English 101, whether or not a student enrolled in remediation.



REMEDIAL PROGRAM REMARKS

Camden is the smallest of the Rutgers University campuses with only 342 freshmen tested for the fall 1983 cohort. Given the small size of the college, the numbers of students who did not enroll in the required remediation courses are surprising. Only 63 percent of the 73 students identified for writing remediation were reported to have taken the course within four semesters. The successful survival rate of unremediated students (~42%) is low compared with the remediation-completed students. Despite apparent inaccuracies in these data on writing enrollment (see footnote on preceding page), the college should be concerned about the fact that so many of its students appear to be avoiding the remedial writing course.

Students who complete remediation in reading at Camden are not as close to their non-remedial peers in successful survival rate as they are in other colleges. No post-test data or percentage of students reaching minimum competency are reported for Camden, making further comment on the reading program effectiveness impossible.

## RUTGERS, THE STATE UNIVERSITY OF NEW JERSEY-- NEWARK

### 1983 FULL-TIME COHORT

Students Tested: 611 97 %

### Placement Criteria

Reading*: NJCBSPT Essay 8; SS 25 (possible 35); TSWE 49; SAT-V 400
Writing: (No separate writing course)
Computation: (No computation course)
El. Algebra: NJCBSPT EA 168; MC 168

### Course Placement, Enrollment and Outcomes

| | Reading* | Writing | Computation | El. Algebra |
|---|---|---|---|---|
| % Identified | 18 | | | 22 |
| % Enrolled | 96 | | | 92 |
| % Passing Final Remedial Course | 82 | | | 84 |
| % Reaching Minimum Competency | N/A | | | N/A |

### Cumulative Four-semester Follow Up

| | Remediation Not Needed | Remediation Completed | Remediation Not Completed |
|---|---|---|---|
| Reading*,1: | | | |
| # Returned Spring 1985 (%) | 396 (79) | 70 (85) | 9 (33) |
| % GPA Greater Than/Equal to 2.0 | 84 | 50 | 38 |
| % Successful Survival | 67 | 43 | 11 |
| % Passing First College-level Course | 95 | 93 | -- |
| Writing: | | | |
| # Returned Spring 1985 (%) | | | |
| % GPA Greater Than/Equal to 2.0 | | | |
| % Successful Survival | | | |
| % Passing First College-level Course | | | |
| Computation: | | | |
| # Returned Spring 1985 (%) | | | |
| % GPA Greater Than/Equal to 2.0 | | | |
| % Successful Survival | | | |
| % Passing First College-level Course | | | |
| Elementary Algebra: | | | |
| # Returned Spring 1985 (%) | 385 (78) | 83 (88) | 7 (33) |
| % GPA Greater Than/Equal to 2.0 | 80 | 74 | 57 |
| % Successful Survival | 63 | 65 | 19 |
| % Passing First College-level Course | 91 | 82 | -- |

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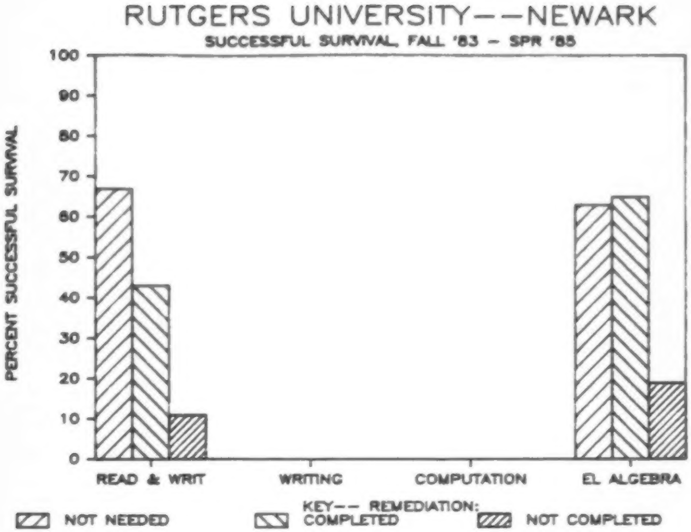
*"English" (includes reading and writing).

[1] Criterion for completion (second and third study groups) is enrollment in English 101, whether or not a student enrolled in remediation.



## REMEDIAL PROGRAM REMARKS

The Newark campus offers reading and writing remediation in a sequence of courses that integrate both areas. In terms of passing the freshmen-level English composition course, the reading/writing remediation-completed students in Newark perform as well as their non-remedial counterparts (92.6% vs. 94.7%). However, there is a wider than desirable gap in the four-semester successful survival rate between the remediation-completed (43%) and the non-remedial students (67%). This is in contrast to last year's cohort where the opposite was true. This warrants investigation.

The elementary algebra program appears more successful in that its remediation-completed students have successful survival rates exceeding those of non-remedial students. No minimum competency or post-test data were reported.

## RUTGERS, THE STATE UNIVERSITY OF NEW JERSEY-- NEW BRUNSWICK

### 1983 FULL-TIME COHORT

Students Tested: 4544 96 %

### Placement Criteria

| | |
|---|---|
| Reading: | NJCBSPT RC 165 |
| Writing: | NJCBSPT SS 168; RC 173; SAT-V 390 |
| Computation: | (No computation course) |
| El. Algebra: | In-house test |

### Course Placement, Enrollment and Outcomes

| | Reading | Writing | Computation | El. Algebra |
|---|---|---|---|---|
| % Identified | 11 | 14 | | 15 |
| % Enrolled | 62 | 88 | | 62 |
| % Passing Final Remedial Course | 81 | 93 | | 72 |
| % Reaching Minimum Competency | N/A | N/A | | N/A |

### Cumulative Four-semester Follow Up

| | Remediation Not Needed | Remediation Completed | Remediation Not Completed |
|---|---|---|---|
| Reading[1]: | | | |
| # Returned Spring 1985 (%) | 3440 (88) | 223 (83) | 179 (73) |
| % GPA Greater Than/Equal to 2.0 | 86 | 60 | 58 |
| % Successful Survival | 75 | 50 | 42 |
| % Passing First College-level Course | 97 | 83 | -- |
| Writing[1]: | | | |
| # Returned Spring 1985 (%) | 3348 (87) | 470 (86) | 24 (34) |
| % GPA Greater Than/Equal to 2.0 | 86 | 65 | 38 |
| % Successful Survival | 75 | 56 | 13 |
| % Passing First College-level Course | 97 | 89 | -- |
| Computation: | | | |
| # Returned Spring 1985 (%) | | | |
| % GPA Greater Than/Equal to 2.0 | | | |
| % Successful Survival | | | |
| % Passing First College-level Course | | | |
| Elementary Algebra: | | | |
| # Returned Spring 1985 (%) | 3319 (88) | 203 (89) | 312 (72) |
| % GPA Greater Than/Equal to 2.0 | 85 | 74 | 72 |
| % Successful Survival | 75 | 66 | 52 |
| % Passing First College-level Course | 87 | 67 | -- |

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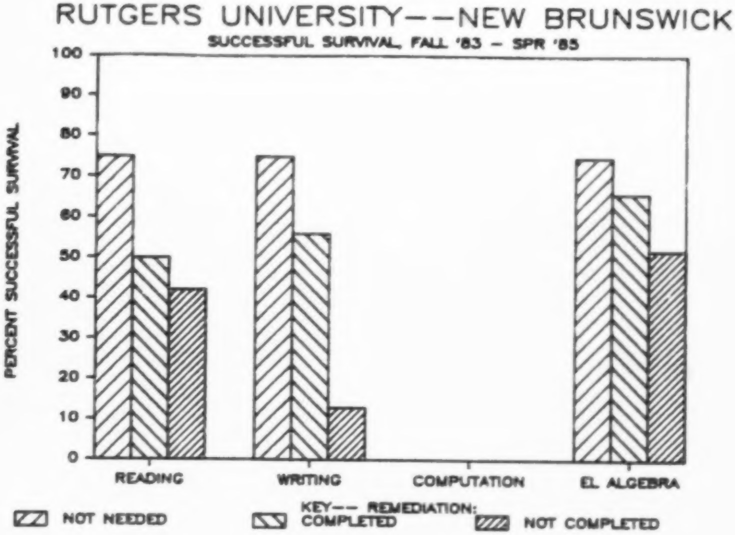
[1] Criterion for completion (second and third study groups) is enrollment in English 101, whether or not a student enrolled in remediation.



REMEDIAL PROGRAM REMARKS

This combination of colleges constitutes the largest and most selective public undergraduate institution in the state. In general, its retention rates and successful survival rates are the highest of any public college. Students who complete remediation have retention rates as high as non-remedial students but GPA's are slightly lower. Students who do not complete remediation in writing by the fourth semester have only a 12.9 percent chance of surviving sucessfully.

The outcomes for students needing remediation in reading were anomalous in last year's report in that a large number of students (over 500) did not complete the reading remediation and yet had higher successful survival rates than remediation- completed students. For the 1983-85 cohort, this pattern has changed to the more common one seen at other colleges. For this cohort, 179 students who had not completed reading remediation remained at Rutgers in the fourth semester. Rutgers suggests that the 1982-84 cohort differed from the 1983-85 cohort in that large numbers of the former who had only minimal verbal skills deficiencies were being placed into both remedial reading and writing courses. Since the reading remediation was recommended but not required, many borderline-level students dropped the courses and survived successfully in the college.

A high successful survival rate (52%) among unremediated students in elementary algebra is a matter of concern. This group has grade point averages as high as remediation-completed students. Mathematics requirements vary among Rutgers' undergraduate colleges and it seems clear from these data that over 300 students do well in New Brunswick, most likely by choosing courses that require little or no algebra preparation.

REVISED 2/85

# GUIDELINES FOR PREPARATION OF 1984 INSTITUTIONAL REPORT ON REMEDIAL PROGRAM EFFECTIVENESS

## 1.0 DEFINITION OF TERMS

For a meaningful interpretation of data reported in the effectiveness report, it is necessary that while analyzing the data, all institutions should keep the following definitions in mind:

1.1 COHORT: The study group should be confined to the cohort of students included in your 1983 institutional report on remedial program effectiveness (i.e. students tested with the NJCBSPT entering in Summer/Fall 1983)

1.2 COMPLETED REMEDIATION: Students identified as needing remediation in the specific basic skill area who enrolled in the appropriate course (or courses if more than one level of remediation was required) and who successfully completed ALL levels of remedial courses in the specific basic skill area.

1.3 FULL-TIME/PART-TIME: Based on students' enrollment status in their entering Fall semester, i.e. Fall 1983 as recorded at the end of the institution's drop/add period (usually the tenth day of classes).

1.4 GPA: Grade Point Average based on college-level (non remedial) courses. Include students who have 0.00 GPA in your calculations. If students received incompletes or withdrew from courses, do not include these courses in your GPA data, but do include their information in the credit attempted variable.

1.5 OTHER METHODS: Students identified as completing remediation by other methods refers to students who completed remediation by means other than coursework. These may include 'testing out' (e.g. challenge exams), individualized instruction, workshops, etc.

1.6 REMEDIAL: The term remedial in these guidelines includes both remedial" and "developmental" programs designed to help skills deficient students improve their basic skills in the areas of reading, writing, computation, and elementary algebra.

1.7 REMEDIAL AREAS: Data should be analyzed and reported separately for each of the four basic skills areas, viz., reading, writing[1], computation, and elementary algebra[2].

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[1] The distinction between the areas of reading and writing may be ignored if the institution treats them as part of a single area of verbal skills.

[2] The distinction between computation and elementary algebra may be ignored if the institution treats them as part of a single area of mathematics skills.

1.8 SUCCESSFUL SURVIVAL RATE: Based on survival rate and grade point average. For the four semester follow-up,the term and cumulative successful survival rates represent the following: (1) term successful survival rate represents the percentage of the Fall, 1983 students who were still enrolled at your institution in the Spring, 1985 semester and who attained a term grade point average of 2.0 or better in the Spring, 1985 semester; and (2) cumulative successful survival rate represents the percentage of the Fall, 1983 students who were still enrolled at your instititon in the Spring, 1985 semester and who attained a cumulative grade point average of 2.0 or better at the end of Spring, 1985.

## 2.0 HISTORY OF PROGRAM

Important to an understanding of a program's effectiveness is a perspective of that program--how did it start, how far has it come, and where is it headed. Briefly summarize, in about two pages, major developments in regard to placement policies, remedial instruction, support services, supervision of program, etc. Describe in a separate section significant changes in the above areas since last year's report was written. Include changes decided or planned for the 1985-86 academic year.

## 3.0 DESCRIPTION OF PROGRAM

### 3.1 Placement Policies and Procedures

Describe current placement policies. Responses to the following questions would help toward a better understanding of these policies.

a. What rationale and/or data were used in setting the placement policies?

b. How are students informed of their basic skills test results and any need for remediation?

c. Is placement in remedial courses required or optional in each of the skills areas? If required, how soon must students enroll in remedial courses?

d. How much time are students allowed to meet college's minimum proficiency requirements?

e. Does the college have a policy which prevents skills deficient students from enrolling in college-level courses? If yes, describe the policy.

f. How are placement policies monitored and enforced?

g. What changes occurred from 1983 to 1984 and from 1984 to 1985?

3.2 Placement and Exit Criteria

Describe the placement criteria used in each of the skills areas of reading, writing, math computation and elementary algebra. How are the criteria set and how are they validated, i.e., how does the institution determine that the use of the criteria is resulting in appropriate placement of students in remedial versus college-level courses?

Are the exit criteria in each of the remedial courses or sequences of courses the same as the college's definition of minimum proficiency (or placement criteria)? If not, describe the relationship between the two. Also, describe how it is ensured that students passing a remedial course have attained at least the minimum skill proficiency required in that area?

3.3 Remedial Courses

Describe the remedial courses in the four skill areas in terms of objectives, topics covered, modes of instruction, (e.g.lecture, computer assisted instruction, etc.), out-of-classroom instructional requirements (e.g., tutorials, skills labs, etc.). Describe the relationship among these courses in terms of sequence, prerequisites, and articulation with regular college-level courses.

3.4 Staffing of Remedial Courses

Describe whether or not your college provides or requires any special training for those faculty members who teach remedial courses?

Describe the procedure which is used to ensure appropriate interaction between remedial and non-remedial faculty on curriculum matters.

3.5 Support Services

Describe what and how instructional and noninstructional support services are provided to aid remedial students (e.g. counseling, academic advisement, tutorials, mentors, etc.). Briefly describe any efforts you have made to evaluate these services.

4.0 RESULTS:

4.1 Efficacy of Placement Policies and Remedial Programs

Institutions may choose to describe the efficacy of their placement policies and remedial program in a variety of ways, but the description should include, at the minimum, the following data.

For each of the four basic skills areas, and separately for part-time and full-time students, supply the following sets of tables. The data for the first two columns in Table A should be identical to that reported in the 1983 Annual Basic Skills Questionnaire filled out by the college. If changes are made explain where and why.

4.11 Table A- Testing and Placement of Students

i.Number of students tested (take from Table 1, total of lines #2 and #3 of the 1983 Annual Questionnaire).

ii.Number and percent of tested students identified for remediation for each basic skills area (take from Table 2, lines a-e of the 1983 Annual Questionnaire).

iii. Number and percent of all students identified as needing remediation in column 2 and enrolled in remediation in any semester from Summer 1983 to Spring 1985. Each student should be counted only once per skill area; numbers should be unduplicated.

iv. Number and percent of students identified as needing remediation in column 2 who are enrolled in Spring 1985 but have never enrolled in a remedial course.

You may also want to identify seperately those students eho have not enrolled in all required remediation because of the sequential nature of some courses. If you choose to report this additional data, be specific. Do not include in category iv. above students who may have been identified as needing remediation in category iv. above, but who later were changed to "not needing remediation", e.g. passed a challenge exam or successfully appealed a placement decision, etc.

SEE SAMPLE TABLE A IN APPENDIX B FOR AN ILLUSTRATION OF THIS TABLE

4.12 Table B- Enrollment in and Completion of,Courses

i Number of students enrolled in the final level of the respective remedial courses in Summer 1983 to Spring 1985. Each student should be counted only once per area, numbers should be unduplicated

ii. Percent of enrolled students who passed, failed, withdrew, or did not complete the remedial course for any other reason.

iii. Number of enrolled students who completed remediation by methods other than coursework. (Refer to definition of "Other Methods" in Definition of Terms.)

SEE SAMPLE TABLE B IN APPENDIX B FOR AN ILLUSTRATION OF THIS TABLE

4.13 Table C- Follow-up of Full-Time Students

Divide all tested students in your Fall, 1983 cohort into the following three groups for each basic skill area. (Refer to definition of full-time/part-time in "1.0 Definition of Terms.")

a. Students who did not need remediation in the specific basic skill area.

b. Students who needed remediation in the specific basic skill area and who completed it by the beginning of Spring 1985. (Refer to definition of "Completed Remediation" in Definition of Terms.)

c. Students needing remediation in the specific skill area but did not complete remediation by the beginning of Spring, 1985. Include both students who enrolled in the remedial/developmental course, but did not complete remediation by the beginning of Spring, 1985 and students who did not enroll in the specified remedial course by Spring, 1985. Do not include in this category students originally identified as needing remediation but whose remedial status was changed subsequently.

Compare the above groups in terms of the following data:

i. Total number of students in each category

ii. Number and percent enrolled in Spring, 1985

iii. Term Data (Based on ii. above)

a. GPA based on college level courses taken in Spring 1985. Provide both Mean GPA and percentages of students below 2.00. (Refer to 1.5 GPA in Definition of Terms.)

b. Mean credits attempted[1] and mean credits earned for college level courses taken in Spring 1985 only. List the number of credits attempted and the number of credits earned. Exclude credits which are earned without enrolling in college level courses, e.g. credits earned via credit by exam, transfer credits and any credits given for remedial/developmental courses.

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[1] As recorded at the end of your institution's drop/add period (usually the tenth day of class).

c. Report Successful Survival Rate as a percentage of the Fall 1983 cohort that were still enrolled in your institution in the Spring, 1985 and that attained a grade pont average of 2.00 or better in the Spring semester.

iv. Cumulative Data (Based on ii. above)

a. GPA based on ALL college-level courses taken up to and including the Spring, 1985. Provide both mean GPA and percentages of students below 2.00. (Refer to 1.5 GPA in Definition of Terms.)

b. Mean credits attempted[1] and credits earned for ALL college-level courses taken up to and including the Spring, 1985.

c. Report Successful Survival Rate as a percentage of the Fall, 1983 cohort who were still enrolled in your institution in Spring, 1985 and who attained a cumulative grade point average of 2.00 or better at the end of Spring, 1985. (Refer to 1.8 Successful Survival Rate in Definition of Terms.)

SEE SAMPLE TABLE C IN APPENDIX B FOR AN ILLUSTRATION OF THIS TABLE

4.14 Table D-Performance of Full-Time Students in First College-Level Courses Taken through Spring, 1985 (Refer to Definition of Terms for definition of full-time/part-time)

For first college-level courses (non-remedial) in English Composition and Mathematics, report the passing rates for students in the two comparison groups (as listed below) who took these courses in Fall 1983 through Spring 1985. If more than one course in English Composition or Mathematics is used, report accumulated data.

a. Students who did not need remediation in the basic skill area related to that course.

b. Students who needed remediation in the specific basic skill area and completed it before taking the college level course.

SEE SAMPLE TABLE D IN APPENDIX B FOR AN ILLUSTRATION OF THIS TABLE

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[1] As recorded at the end of your institution's drop/add period (usually the tenth day of class).

4.15 Table E Pre- and Post-Testing

If you can, report cumulative data on pre- and post-testing in the revised Table E as explained below. If you cannot report cumulative data, attach Table E from the two-semester follow-up report (based on the Fall 1983 cohort) submitted last year. In future effectiveness reports, only cumulative data will be expected.

Present data listed below for only the final level of remedial course offered in each skill area offered from Summer, 1983 through Spring, 1985. Cumulative pre- and post-test data should be reported only for students who were part of the 1983 cohort and who passed the final level of the remedial course.

Supply the following data for each final basic skills course.

a. Name of course. Be Specific.

b. Total number enrolled in course.

c. Minimum score needed to determine proficiency , e.g. the scaled/standard score which will exempt students from being placed in that final course.

d. Number and percent of students in (b) who took the pre-test and the post-test and who passed the course. Do not include students who took both tests, but did not complete the course.

e. Pre-test mean and standard deviation

f. Post-test mean and standard deviation

g. Percent of students in (d) attaining the minimum level on the post-test. Specify the percent of students whose post-test scores were equal to or more than the score specified in (c).

SEE SAMPLE TABLE E IN APPENDIX B FOR AN EXAMPLE OF HOW TO PRESENT THE RESULTS IN THIS SECTION.

To help institutions make appropriate use of the pre-test and post-test design in drawing conclusions, a non-technical paper on pre- and post-testing is attached as an appendix to these guidelines. (See Appendix A)

GUIDELINES

_Appendix A_ omitted from this report.

## SAMPLE TABLE A

### Testing and Placement of Students
### From Fall 1983 Through Spring 1985
### Fall 1983 Cohort

| BASIC SKILL AREA | Tested | | Identified for Remediation | | | | All Students Enrolled in Any Semester From Summer '83 to Spring '85 | | | | Enrolled in Spring '85 But Had Never Enrolled In Remedial Course | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | FT | PT | Full-Time | | Part-Time | | Full-Time | | Part-Time | | Full-Time | | Part-Time | |
| | # | # | # | % | # | % | # | % | # | % | # | % | # | % |
| READING | | | | | | | | | | | | | | |
| WRITING | | | | | | | | | | | | | | |
| COMPUTATION | | | | | | | | | | | | | | |
| ELEMENTARY ALGEBRA | | | | | | | | | | | | | | |

## SAMPLE TABLE B
## ENROLLMENT IN AND COMPLETION OF REMEDIAL COURSES
## FALL 1985 to SPRING 1985

| BASIC SKILL AREA | All Students Enrolled In Any Semester From Summer/Fall '83 to Spring '85 | | COURSE OUTCOMES[1] | | | | | | | | Completed Remediation By Other Methods[3] | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Passed | | Failed | | Withdrew | | Other[2] | | | |
| | FT # | PT # | FT % | PT % | FT % | PT % | FT % | PT % | FT % | PT % | # FT | # PT |
| READING Final Level | | | | | | | | | | | | |
| WRITING Final Level | | | | | | | | | | | | |
| COMPUTATION Final Level | | | | | | | | | | | | |
| ELEMENTARY ALGEBRA Final Level | | | | | | | | | | | | |

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[1] Percentages are based on enrollment figures in the first two columns of this table.

[2] Students who did not pass, fail or withdraw. Specify who is included in this group.

[3] Specify by what other methods students completed remediation.

**SAMPLE TABLE C**
**FOLLOW UP OF FULL-TIME STUDENTS**
**FALL 1983 COHORT**
**BASED ON SPRING 1985 DATA**

| STUDY GROUPS[1] | Total Number | Returned Spring '85 | | TERM DATA | | | | | CUMULATIVE DATA | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | # | % | GPA[2] Mean | GPA[2] % 2.00 | Mean Credits Attempted | Mean Credits Earned | SUCCESSFUL SURVIVAL RATE | GPA[2] Mean | GPA[2] % 2.00 | Mean Credits Attempted | Mean Credits Earned | SUCCESSFUL SURVIVAL RATE |
| READING<br>A. Required no remediation in READING<br>B. Needed remediation in READING and completed it<br>C. Needed remediation in READING but did not complete it | | | | | | | | | | | | | |
| WRITING<br>A. Required no remediation in WRITING<br>B. Needed remediation in WRITING and completed it<br>C. Needed remediation in WRITING but did not complete it | | | | | | | | | | | | | |
| COMPUTATION<br>A. Required no remediation in COMPUTATION<br>B. Needed remediation in COMPUTATION and completed it<br>C. Needed remediation in COMPUTATION but did not complete it | | | | | | | | | | | | | |
| ELEMENTARY ALGEBRA<br>A. Required no remediation in ALGEBRA<br>B. Needed remediation in ALGEBRA and completed it<br>C. Needed remediation in ALGEBRA but did not complete it | | | | | | | | | | | | | |

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[1] Refer to Section 5.2 of the Guidelines for breakdown on STUDY GROUPS.
[2] Refer to Definition of Terms (Section 1.0 of Guidelines) for detailed description.

### SAMPLE TABLE D

### Performance of Full-Time Students in First College-Level Courses Taken Through Spring 1985

(FALL 1984 COHORT)

| | ENGLISH COMPOSITION First College-Level Course Taken | |
|---|---|---|
| | No. Enrolled | % Pass |
| READING REMEDIATION | | |
| A. Required no remediation in READING. | | |
| B. Needed remediation in READING and completed it. | | |
| WRITING REMEDIATION | | |
| A. Required no remediation in WRITING. | | |
| B. Needed remediation in WRITING and completed it. | | |

| | MATH First College-Level Course Taken | |
|---|---|---|
| | No. Enrolled | % Pass |
| COMPUTATION REMEDIATION | | |
| A. Required no remediation in COMPUTATION. | | |
| B. Needed remediation in COMPUTATION and completed it. | | |
| ELEMENTARY ALGEBRA REMEDIATION | | |
| A. Required no remediation in ALGEBRA. | | |
| B. Needed remediation in ALGEBRA and completed it. | | |

## SAMPLE TABLE E

### Pre-Test and Post-Test Results for Remedial Courses In Reading, Writing, Math Computation and Elementary Algebra
(Fall 1983 Cohort)

CUMULATIVE DATA FOR SUMMER 1983 THROUGH SPRING 1985

| **Name of Course**[1] | **Total Number*** **Enrolled** **In Course** | **Minimum Score Needed to Determine Proficiency**[2] | **#*** | **%** | PRE-TEST | | POST-TEST | | % of Students Attaining Min. Level on the Post-Test[3] |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | **Mean** | **Standard Deviation** | **Mean** | **Standard Deviation** | |
| | | | | | | | | | |
| | | | | | | | | | |
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* **should include those students who took both pre-test and the post-test, and who passed the** course.

[1] Report data only for the final level of the remedial courses in each skill area.

[2] The scaled/standard score which will exempt students from being placed in the remedial course.

[3] Percent of students whose post-test scores were equal to or more than the minimum score on the pre-test (see footnote 1)

## GUIDELINES

## APPENDIX C

The following are areas of research that you *may* want to explore as part of your effectiveness report. These topics have been identified by colleges throughout the state as areas of interest and concern. They are listed here for your information.

(1) Cost/benefit analysis of remedial programs

(2) Comparison of "failure" rate and "disappear" rate of remedial students.

(3) Study of remedial students by number of skills deficiencies.

# NEW JERSEY BASIC SKILLS COUNCIL
# PUBLICATIONS AND RELATED REPORTS*

*Student Information Bulletin*

*Interpreting Mathematics Scores on the New Jersey College Basic Skills Placement Test*

*Interpreting Scores on the New Jersey College Basic Skills Placement Test*

*Scoring the Essay*

*Teaching Reading & Writing*: Observations Derived From the Results of the New Jersey College Basic Skills Placement Test

*Report on the Character of Remedial Programs in New Jersey Public Colleges and Universities, Fall 1984*, New Jersey Basic Skills Council, October 18, 1985

*Thinking Skills: An Overview*, Report of the Task Force on Thinking, New Jersey Basic Skills Council, March 19, 1986

*Report to the Board of Higher Education on Results of the New Jersey Basic Skills Placement Testing and Recommendations on Instruction and Curriculum, Fall 1985*, New Jersey Basic Skills Council, March 21, 1986

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*Publications and reports are available from the Basic Skills Office, New Jersey Department of Higher Education, 225 West State Street, Trenton, NJ 08625.

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